

# LIYUAN CUI

## CURRICULUM VITAE

September 12, 2023

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College of Business  
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## EDUCATION

Ph.D.	Economics, Cornell University	May 2017
M.P.S.	Statistics, Cornell University	May 2011
B.S.	Mathematics and Applied Mathematics, Wuhan University	June 2010
B.S.	Finance, Wuhan University	June 2010

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## ACADEMIC POSITIONS

Assistant Professor, Department of Economics and Finance, City University of Hong Kong, 2017–present

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## FIELD CONCENTRATIONS

Financial econometric; econometric theory, nonparametric analysis; big data; machine learning; asset pricing; macro-finance; real estate economics; policy evaluation

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## JOURNAL PUBLICATIONS

1. **Liyuan Cui**, Yongmiao Hong, Yingxing Li, and Junhui Wang (2023), “Positive definite estimation of sparse and low-rank covariance matrices with high dimensional and high frequency data.” *Management Science (Finance Department)*, *Forthcoming*.
2. **Liyuan Cui**, Guanhao Feng, and Yongmiao Hong (2023), “Regularized GMM for Time-Varying Models with Applications to Asset Pricing.” *International Economic Review*, *Forthcoming*.
3. **Liyuan Cui**, Yongmiao Hong, and Yingxing Li (2021), “Solving Euler Equations via Two-Stage Nonparametric Penalized Splines.” *Journal of Econometrics* (222), 1024-1056.
4. Jun Han, **Liyuan Cui**, and Huayi Yu (2021), “Pricing the value of the chance to gain admission to an elite senior high school in Beijing: The effect of the LDHSE policy on resale housing prices.” *Cities* (115), 103238.
5. Huayi Yu, Junlin Tan, and **Liyuan Cui**(Corresponding author) (2023), “Influential mechanism of state-level new areas on housing prices and its spatial spillover effect.” *China Soft Science* (《中国软科学》), Vol. 2023, No. 1, pp. 94-104.
6. **Liyuan Cui** and Yongmiao Hong (2017), “Do investors’ distorted beliefs in economic fundamentals affect equity prices? A comparison study of China and the United States.” *Economic Research Journal* (《经济研究》), 52(08): 94-109

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## PAPERS IN RESUBMISSION

1. **Liyuan Cui**, Zeyu Chen, Yanfen Huang, and Huayi Yu, “Local Government’s Greenwash: The Transfer of Atmospheric Pollution Boundary Led by Regional Environmental Policy in China.” *Reject and Resubmit*, *Journal of Environmental Economics and Management*.

2. **Liyuan Cui**, Yongmiao Hong, and Jingyi Yao, “A Nonparametric GMM Series Approach to Solving Asset Pricing Models with Recursive Preferences.” *2nd Round Revise and Resubmit, Journal of Business and Economic Statistics*.
3. **Liyuan Cui** and Huayi Yu, “Housing Purchase Restrictions and the Stabilization of Land Market: Evidence based on Micro data of Land Transaction from 2009 to 2017.” *Revise and Resubmit, Economic Research Journal(《经济研究》)*.

## WORKING PAPERS

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1. **Liyuan Cui**, Guanhao Feng, Yongmiao Hong, and Jiangshan Yang, “Time-Varying Model Selection: A Sparse Fused GMM Approach.”
2. **Liyuan Cui**, Yongmiao Hong, and Jingyi Yao, “Estimating High-Dimensional Multivariate GARCH Models: A Nuclear Norm-based Regularized QMLE Approach.”
3. Zeyun Bei, **Liyuan Cui**, and Yinggang Zhou, “Dynamic Changes of Global Spillover Networks and the Underlying Drivers: A New Tool for Event Study.”
4. **Liyuan Cui**, Guanhao Feng, Yongmiao Hong, and Jiangshan Yang, “Heterogeneous Risk price: A Nonparametric Approach.”
5. **Liyuan Cui**, Guanhao Feng, Yongmiao Hong, and Jiangshan Yang, “Dynamic Betas: A New Reproducing Kernel Hilbert Space Approach.”
6. **Liyuan Cui**, Guanhao Feng, and Jianxin Ma, “Time-varying Forecasting Combinations.”
7. **Liyuan Cui**, Guanhao Feng, and Yongmiao Hong, “Evaluating and Measuring Time-varying Model Misspecification: Revisiting Conditional Asset pricing Models.”

## RESEARCH GRANTS

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- **The Research Grants Council Hong Kong (RGC)**

1. PI: Estimating and Testing Time Variation Modeling Misspecification, General Research Fund (**GRF**), 2023-24
2. PI: High Dimensional Time-varying Forecast Combination: A Unified Approach for Abrupt and Smooth Instabilities, General Research Fund (**GRF**), 2022-23
3. PI: Estimation and Inference of Large Dimensional Unobservable Dynamic Uncertainties, General Research Fund (**GRF**), 2021-22
4. PI: A Mixed Convex Penalized Machine Learning Approach for High-Dimensional Financial Data with its Application on Vast Portfolio Selections, General Research Fund (**GRF**), 2019-2020
5. PI: A Local Series Estimation Method with its Application in Solving Asset Pricing Models with Time-Varying State Variables”, Early Career Scheme (**ECS**), 2018-2019

- **The National Natural Science Foundation of China (NSFC)**

6. PI: Non-parametric Effective Estimation Method for Non-linear and Non-stationary Variables and Its Application in Capital Asset Pricing Theory, **NSFC-Youth Scientists Fund**, 2019-2021

- **Mainland China Provincial Grants**

7. PI: “Heterogeneity in Housing Market Policies-Theoretical and Empirical Analysis Based on Chengdu’s Housing Market Big Data”, **Sichuan Provincial Science & Technology Research Grants**, 2019-2020
8. Co-I: “China’ stock and future markets’ risk modeling”, **Sichuan Provincial Science & Technology Research Grants**, 2020-2021

- **Other Grants**

9. PI: Machine Learning Time Variation through the Cross Section with its Application on Conditional Asset Pricing Models”, Strategic Research Grants-City University of Hong Kong, 2020-2023.
10. PI: A Nonparametric GMM Series Approach to Solving Asset Pricing Models with Non-Markov State Variables, Start-up Research Fund, 2018-2021

## CONTRIBUTED CONFERENCES AND INVITED SEMINAR TALKS

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- **Contributed Conference Presentations**

- International Symposium on Advance in Panel Data and Time Series Econometrics in Honor of Cheng Hsiao, China, July 2023
- Financial Econometrics Conference Lancaster University, UK, March 2023
- China Journal of Econometrics: 2nd Big Data Econometric Theory and Applications-Time Series Modeling and Application Conference, Hunan, China, May 2023
- The 16th International Symposium on Econometric Theory and Applications, Korea, July 2022.
- 72nd European Meeting of the Econometric Society, Manchester, UK, August 2019
- 2019 Asian Meeting of the Econometric Society, Xiamen, China, June 2019

- **Invited Seminar Talks**

- School of Economics/Finance, Central University of Finance and Economics, July 2023
- School of Finance, Renmin University of China, July 2023
- School of Economics, Renmin University of China, June 2023
- School of Economics, Peking University, June 2023
- School of Economics, Xiamen University and School of Economics and Management, UCAS, December 2022
- Department of Economics, University of California Riverside, USA, January 2021

## JOURNAL REFEREE

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*Econometrics and Statistics, Management Science, Journal of Business & Economic Statistics, Journal of Econometrics, Journal of Empirical Finance, Journal of Financial Econometrics, Economic Research Journal (《经济研究》).*

## SUPERVISED STUDENTS

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- **PhD Students**

- Chair: Jiangshan Yang (2022 Cohort; Co-chair: Guanhao Feng)
- Co-Chair: Jingyi Yao (2018 Cohort; Co-chair with Xiao Qiao)

- **College of Business Honor Thesis**

- CHEN Jianxiang (2019), GUANG Hao (2019), LI Zhijie (2019), MAK Ming Chun (2019), YIM Tsz Ying (2019), Yue Ma (2019), SIN Ho Yeung (2020), YUEN Sheung Man (2021), SUTANTO Levina Athalia (2022), LU Yifan (2022), SHI Ruiqi (2022), ANDREAS (2022)

## TEACHING PORTFOLIO

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- **City University of Hong Kong**  
**Course Leader and Instructor**

- EF4822 Financial Econometrics (CFIN Undergraduate), 2017-present
- EF5070 Financial Econometrics (Taught Master), 2017-present
- EF8083 Empirical Asset Pricing (PhD Core Course), 2020-2022
- CB4001 College of Business Honors Thesis, 2018-present

## **COLLEGE AND DEPARTMENTAL SERVICES**

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- **College Level Services**

College Board Member, 2019-present

- **Departmental Level Services**

Joint Programme Committee for MSF/FE, 2018-present

## **REFERENCES**

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**Yongmiao Hong (Chair)**

the Ernest S. Liu Professor of Economics  
and International Studies  
Department of Economics  
424 Uris Hall  
Cornell University  
Email: yh20@cornell.edu  
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**Ming Huang (Co-chair)**

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