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Zhongjun Qu

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EDUCATION

Ph.D. in Economics, Boston University, May 2005
M.A. in Political Economy, Boston University, 2003
B.S. in Mathematics, Nankai University, Tianjin, China, 1998

POSITIONS

2020-Present	Professor of Economics, Department of Economics, Boston University
2013-2020	Associate Professor, Department of Economics, Boston University
2007-2013	Assistant Professor, Department of Economics, Boston University
2005-2007	Assistant Professor, University of Illinois at Urbana-Champaign

RESEARCH INTERESTS

Econometrics, Quantitative Macroeconomics, Empirical Finance

PUBLICATIONS

1. "Inference on Conditional Quantile Processes in Partially Linear Models with Applications to the Impact of Unemployment Benefits," (with Jungmo Yoon and Pierre Perron), forthcoming in the *Review of Economics and Statistics*.
2. "Sieve Estimation of Option-Implied State Price Density," (with Junwen Lu), *Journal of Econometrics (Annals Issue: PI Day)*, 224 (2021), 88-112.
3. "Likelihood Ratio Based Tests for Regime Switching," (with Fan Zhuo), *Review of Economic Studies*, 88 (2021), 937–968.
4. "Uniform Inference on Quantile Effects under Sharp Regression Discontinuity Designs," (with Jungmo Yoon), *Journal of Business and Economic Statistics*, 37 (2019), 625-647.
5. "A Composite Likelihood Framework for Analyzing Singular DSGE Models," *Review of Economics and Statistics*, 100 (2018), 916-932.
6. "Global Identification in DSGE Models Allowing for Indeterminacy," (with Denis Tkachenko), *Review of Economic Studies*, 84 (2017), 1306–1345.

7. "Nonparametric Estimation and Inference on Conditional Quantile Processes," (with Jungmo Yoon), *Journal of Econometrics,* 185 (2015), 1-19.
8. "M Tests with a New Normalization Matrix," (with Yi-Ting Chen), *Econometric Reviews,* 34 (2015), 617-652.
9. "Inference in DSGE Models with Possible Weak Identification," *Quantitative Economics*, 5 (2014), 457-494.
10. "A Stochastic Volatility Model with Random Level Shifts and its Applications to S&P 500 and NASDAQ Return Indices," (with Pierre Perron), *Econometrics Journal,* 16 (2013), 309-339.
11. "Frequency Domain Analysis of Medium Scale DSGE Models with Application to Smets and Wouters (2007)," (with Denis Tkachenko), *Advances in Econometrics (Volume 28, 2012), 319-385.*
    This paper received the *Outstanding Author Contribution Award* at the Literati Network Awards for Excellence (2013).
12. "Identification and Frequency Domain Quasi-maximum Likelihood Estimation of Linearized Dynamic Stochastic General Equilibrium Models," (with Denis Tkachenko), *Quantitative Economics*, 3 (2012), 95-132. (Supplement: http://qeconomics.org/supp/126/supplement.pdf)
13. "A Test Against Spurious Long Memory," *Journal of Business and Economic Statistics*, 29 (2011), 423–438.
14. "Estimating Structural Changes in Regression Quantiles," (with Tatsushi Oka), *Journal of Econometrics*, 162 (2011), 248-267.
15. "Long-Memory and Level Shifts in the Volatility of Stock Market Return Indices," (with Pierre Perron), *Journal of Business and Economic Statistics*, 28 (2010), 275-290.
16. "Testing for Structural Change in Regression Quantiles," *Journal of Econometrics*, 148 (2008), 170-184.
17. "Searching for Cointegration in a Dynamic System," *Econometrics Journal*, 10 (2007), 580-604.
    Reprinted in VIRTUAL ISSUE: Celebrating ten years of The Econometrics Journal.
18. "Estimating and Testing Structural Changes in Multivariate Regressions," (with Pierre Perron), *Econometrica*, 75 (2007), 459-502. (Supplement: http://www.econometricsociety.org/ecta/supmat/ECTA5733SUPP.pdf)
19. "A Modified Information Criterion for Cointegration Tests based on a VAR Approximation," (with Pierre Perron), *Econometric Theory*, 23 (2007), 638-685.
20. "A Simple Modification to Improve the Finite Sample Properties of Ng and Perron's Unit Root Tests," (with Pierre Perron), *Economics Letters*, 94 (2007), 12-19.
21. "Estimating Restricted Structural Change Models," (with Pierre Perron), *Journal of Econometrics*, 134 (2006), 373- 399.

WORKING PAPERS

1. "Using Arbitrary Precision Arithmetic to Sharpen Identification Analysis for DSGE Models," (with Denis Tkachenko), December 2019, Revise and Resubmit, *Journal of Applied Econometrics*.

2. “Modeling Markov Regime Switching in High Dimensional Data,” with Anlong Qin.

AWARDS AND HONORS

1. Fellow, Journal of Econometrics, 2021
2. Best Associate Editor Award, *Journal of Econometrics*, 2019.
3. Keynote speaker, Workshop on Time Series Econometrics (Barcelona GSE Summer Forum, 2017)
4. Advisor of the Year, awarded by the Graduate Economics Association at Boston University, 2014.
5. Honorable Mention for Arnold Zellner Thesis Award Competition, *Journal of Business and Economic Statistics*, 2006.
6. The Economics Graduate Students’ Organization Award for Excellence in Teaching a Core Class, Department of Economics, University of Illinois at Urbana-Champaign, Spring 2006

PROFESSIONAL ACTIVITIES

Associate Editor

Journal of Econometrics (2019-now)

Journal of Business and Economic Statistics (2018-2024)

Journal of Time Series Analysis (2019-now)

Journal of Econometric Methods (2018-2022)

Econometrics Journal (2012-2024)

Guest Co-editor

Special Issue “Annals Issue: PI Day” for *Journal of Econometrics*; published in 2021.

Special issue “Time Series Econometrics” for *Journal of Risk and Financial Management*

Referee

Annals of Statistics, Communications in Statistics–Theory and Methods, Econometrica, Econometric Reviews, Econometric Theory, Econometrics Journal, Economics Letters, Empirical Economics, International Economic Review, International Regional Science Review, Journal of Applied Econometrics, Journal of Applied Statistics, Journal of Banking and Finance, Journal of Business and Economic Statistics, Journal of Economic Dynamics and Control, Journal of Econometric Methods, Journal of Econometrics, Journal of Economic Dynamics and Control, Journal of Financial Econometrics, Journal of Monetary Economics, Journal of Nonparametric Statistics, Journal of Statistical Software, Journal of the American Statistical Association, NSF, Nonlinear Analysis: Modeling and Control, Oxford Bulletin of Economics and Statistics, Quantitative Economics, Review of Economics and Statistics, The Review of Economic Studies, Studies in Nonlinear Dynamics and Econometrics, the Quarterly Review of Economics and Finance, TEST

Conference Committee

Committee Chair, NBER-NSF Time Series Conference, 2022, Boston.
Scientific Committee Member, 4th International Association of Applied Econometrics, 2017, Sapporo
Scientific Committee Member, 3rd International Association of Applied Econometrics, 2016, Milan
Program Committee Member, Summer Meetings of the Econometric Society, 2009, Boston

SEMINARS AND CONFERENCE PRESENTATIONS

"Using Arbitrary Precision Arithmetic to Sharpen Identification Analysis for DSGE Models," Indiana (October 2021), Notre Dame (April 2021), Rochester (April 2019), Carnegie Mellon (April 2019), Annual Meeting of the Southern Economic Society (November 2018), Frontiers in Econometrics Conference (University of Connecticut, June 2018), Identification in Econometrics Conference (Vanderbilt, April 2018), Columbia (October 2017)

"Sieve Estimation of Option-Implied State Price Density," the Central Bank of Chile (January 2020), CIREQ-Concordia Econometrics Seminar (November 2019), Syracuse (October 2019), CEMMAP UCL/Vanderbilt Joint Conference (October 2019)

"Frequency Domain Methods and DSGE Models," short lecture at the Central Bank of Chile (January 2020)

"Likelihood Ratio Based Tests for Regime Switching," Workshop on Long-Range Dependence (Leibniz University, October 2018), Cemfi (May 2017), Barcelona GSE Summer Forum (June 2017), NBER-NSF Time Series Conference (September 2016), North American Wintering Meeting of the Econometric Society (January 2016), Brown (October 2014)

"Uniform Inference on Quantile Effects under Sharp Regression Discontinuity Designs," Iowa (March 2017)

"Global Identification in DSGE Models Allowing for Indeterminacy," NYU (November 2015), Carleton (November 2015), Renmin U (May 2015), Academia Sinica (June 2014), National Sun Yat-sen University (June 2014), MSU (April 2014), NBER Summer Institute (July 2013), Time Series Conference at Montreal (May 2013), Brandeis (March 2013), North American Winter Meeting of the Econometric Society (January 2013)

"A Composite Likelihood Framework for Analyzing Singular DSGE models," Johns Hopkins (May 2017), NBER Conference EFSF mid-year meeting (October 2015), Econometric Society World Congress (August 2015), Maryland (November 2013), Vanderbilt (October 2013)

2012 North American Winter Meeting of the Econometric Society, UC-San Diego, Yale, Brown, Boston College, Rutgers

2011 Queen's University, North Carolina State University, Harvard-MIT metrics seminar, Summer Meeting of the Econometric Society, Columbia, BU-BC mini-conference

2010 North American Winter Meeting of the Econometric Society, NBER-NSF Time Series Conference, Duke (Young Economists Jamboree in Econometrics), Midwest Econometrics Group Meeting, EC2 meeting in Toulouse (Identifications in Econometrics)

2009 North American Winter Meeting of the Econometric Society, Summer Meeting of the Econometric Society, Academia Sinica, National Taiwan University, Time Series Conference at Montreal (III)

2008 MIT Econometrics Lunch, UIUC, Boston University

2007 Brown University, Université de Montréal, Hitotsubashi University

2006 Brown University, UIUC (Statistics Dept), Far Eastern Meeting of the Econometric Society

DEPARTMENT and UNIVERSITY SERVICE

Graduate Academic Affairs Committee, Graduate School of Arts & Sciences, 2020-
Chair of Department Junior Faculty Recruiting Committee, Economics Department, 2018-2019
Chair of Department Junior Faculty Recruiting Committee, Economics Department, 2017-2018
Chair of Department Junior Faculty Recruiting Committee, Economics Department, 2016-2017

TEACHING

Spring 2022	Financial Econometrics (EC794, Ph.D.)
	Empirical Economic Analysis II (EC304, Undergraduate)
Spring 2021	Financial Econometrics (EC794, Ph.D.)
	Empirical Economic Analysis II (EC304, Undergraduate)
Spring 2020	Financial Econometrics (EC794, Ph.D.)
Fall 2019	Empirical Economic Analysis II (EC304, Undergraduate)
Spring 2019	Financial Econometrics (EC794, Ph.D.)
	Advanced Econometrics I (EC708, Ph.D.)
Spring 2018	Financial Econometrics (EC794, Ph.D.)
Fall 2017	Advanced Econometrics II (Part Two) (EC709, Ph.D.)
Spring 2017	Financial Econometrics (EC794, Ph.D.)
	Empirical Economic Analysis II (EC304, Undergraduate)
Fall 2007 ~	Financial Econometrics (EC794, Ph.D.)
Fall 2016	Introduction to Econometrics (EC414, Undergraduate)
	Advanced Econometrics I (Part Two) (EC708, Ph.D.)
	Advanced Econometrics II (Part One) (Ph.D.)
	Time Series Analysis (Part Two) (EC712, Ph.D.)
Fall 2005 ~	Econometric Analysis (Ph.D.)
Spring 2007	Introduction to Econometrics (Undergraduate)
(UIUC)	Time Series Analysis (Ph.D.)
	Department of Economics, University of Illinois at Urbana Champaign

PH.D. THESIS SUPERVISION

Main Advisor (*placement* and *dissertation title*):

Guang Zhang, Ph.D. Economics, 2021, Assistant Professor, HKUST (Guangzhou). "*Essays on nonlinear filtering with applications in finance*."

Taosong Deng, Ph.D. Economics, 2021, Assistant Professor, Hunan University. "*Three Essays on Predictive Regression, Low-frequency Variation, and Dynamic Stochastic General Equilibrium Models*."

Andres Sagner, Ph.D. Economics, 2018, *Central Bank of Chile*. "*Three Essays on Quantile Factor Analysis*."
Yuan Tian, Ph.D., Economics, 2018, *Alibaba*. "*Econometric Analysis of Heterogeneity in Financial Markets Using Quantile Regressions*."
Francois Guay, Ph.D. Economics, 2016, *Cornerstone Research*. "*Parameter Inference for Multivariate Stochastic Processes with Jumps*."
Fan Zhuo, Ph.D., Economics, 2016, *Amazon*. "*Essays on Regime Switching and DSGE Models with Applications to U.S. Business Cycle*."
Denis Tkachenko, Ph.D. Economics 2012, Assistant Professor, *National University of Singapore*. "*Frequency Domain Analysis of DSGE and Stochastic Volatility Models*."
Shinsuke Ikeda, Ph.D. Economics 2010, Assistant Professor, *Graduate Institute of Policy Studies*, Tokyo, Japan. "*Three Essays on Bias-corrected Kernel Methods for the Estimation of the Covariation of Security Prices*."

Committee Member:

Mengmeng Li, Ph.D. Economics 2015, Ernst & Young
Aparna Dutta, Ph.D. Economics 2015, Bates and White LLC
Seong Yeon Chang, Ph.D. Economics 2014, Xiamen University, China
Jie Hou, Ph.D. Economics 2014, Capital University of Economics and Business, China
Wendong Shi, Ph.D. Economics 2013, Renmin University, Beijing, China
Jiawen Xu, Ph.D. Economics 2013, Shanghai University of Finance and Economics, China
Ye Li, Ph.D. Economics 2013, Moody's Analytics, Philadelphia
Adam McCloskey, Ph.D. Economics 2011, Brown University
Linxia Ren, Ph.D. Economics 2011, SAS Institute Inc
Tatsushi Oka, Ph.D. Economics 2010, National University of Singapore
Yohei Yamamoto, Ph.D. Economics 2009, University of Alberta, School of Business
Jing Zhou, Ph.D. Economics 2008, BlackRock, Inc
Jungmo Yoon, Ph.D. Economics 2008, Claremont Mckenna College
Sungyong Park, Ph.D. Economics 2007, Chinese University of Hong Kong