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# Denis Tkachenko


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| Assistant Professor | Office: +65 6516 6019 |
| Department of Economics | Email: ecstd@nus.edu.sg |
| National University of Singapore | |


## EDUCATION

Ph.D., Economics, Boston University, 2012

M. Litt., Economics, Trinity College Dublin, 2007

M. Sc., Economics, Trinity College Dublin, 2006

B.A.(Mod.), Economic and Social Studies (*First Class Honors*), Trinity College Dublin, 2005

## POSITIONS

Assistant Professor of Economics, National University of Singapore, July 2012-Present

## FIELDS OF INTEREST

Econometric Theory, Macroeconometrics, Financial Econometrics, Computational Economics

## PUBLICATIONS

Qu, Zhongjun and Tkachenko, Denis. "Global Identification in DSGE Models Allowing for Indeterminacy", *Review of Economic Studies*, 84(2017), 1306-1345.

Tkachenko, Denis and Qu, Zhongjun. "Frequency Domain Analysis of Medium Scale DSGE Models with Application to Smets and Wouters (2007)", *Advances in Econometrics (Volume 28): DSGE Models in Macroeconomics – Estimation, Evaluation and New Developments,* 2012, 319-385.

(Awarded the *Outstanding Author Contribution Award* at the Emerald Literati Network Awards for Excellence 2013.)

Qu, Zhongjun and Tkachenko, Denis. "Identification and Frequency Domain Quasi-maximum Likelihood Estimation of Linearized Dynamic Stochastic General Equilibrium Models", *Quantitative Economics*, 3(2012), 95-132.

## WORKING PAPERS

Qu, Zhongjun and Tkachenko, Denis. "Using Arbitrary Precision Arithmetic to Sharpen Identification Analysis for DSGE models", in preparation for *Quantitative Economics*.

## WORK IN PROGRESS

Oka, Tatsushi and Tkachenko, Denis. "Bayesian Information Criteria for Segmented Quantile Regression".

McCloskey, Adam, Qu, Zhongjun and Tkachenko, Denis. "Frequency Domain Diagnostics of DSGE Models Allowing for Weak Identification".

## TEACHING EXPERIENCE

Economic and Financial Forecasting, National University of Singapore, Sem. 2 2015/2016, Sem. 1 and 2 2016/2017, Sem. 1-2 2017/2018

Financial Economics II, National University of Singapore, Sem. 1 2013/2014, Sem. 2 2014/2015

Econometrics I, National University of Singapore, Sem. 1 and 2, 2012/2013, Sem. 1 2013/2014, Sem. 1 and 2, 2014/2015

Introduction to Econometrics, Boston University, Spring 2010, Spring 2012

Teaching Fellow, Advanced Econometrics II (PhD level), Boston University, Fall 2009 and Fall 2010

Teaching Fellow, Introduction to Macroeconomics, Boston University, Fall 2008 and Spring 2009

Teaching Fellow, Microeconomics I (M.Sc. level), Trinity College Dublin, Fall 2006

Teaching Fellow, Economic Theory, Trinity College Dublin, Spring 2007

Teaching Fellow, Intro to Math and Statistics, Trinity College Dublin, Fall 2005 and Spring 2006

## HONORS THESIS SUPERVISION

2012/2013: Song Qi; 2013/2014: Siow Wen Seng, Zeng Zheng, Valerie Tang Yi Ling;

2014/2015: Lai Yean Kuan Grace, Luu Diu Khue; 2015/2016: Amanda Rae Sim Wei, Lam Wei Ming Derek, Lee Wei Ming Eugene, Samson Lee Gong Hao; 2016/2017: Tek Yong Jian , Koh Bing Hao, Wu Ming Yue, Hoe Tze Han; (2017/2018) Chin Han Wei Jarrett, Hazel Lim Si Min, Michelle Wang Shuting, Ng You Hao, Gregory Ang Tai Xiang, Foong Wan Lin Valerie.

## Graduate Student Supervision

Chang Kung-Chi, NUS Master of Social Science (by research), main advisor, 2018-present.

Zhu Yanqi, PhD, Thesis Committee Member, 2014-present.

Shen Yifan, PhD, Thesis Committee Member, completed 2016 (placement: Nanjing Audit University Institute of Politics and Economics).

## Research Grants

"Econometric Methods for Policy Analysis: Identification, Estimation and Testing", Ministry of Education, AcRF Tier-1 (FY2015-FRC3-003), Singapore, co-principal investigator, 2016.02-2019.01.

"Global identification, spectral inference and specification testing in DSGE models", Ministry of Education, AcRF Tier-1 (FY2015-FRC2-009), Singapore, principal investigator, 2015.10-2018.09.

Startup Research Grant, National University of Singapore, 2012

Summer Research Grant, Boston University, 2009, 2010

## Fellowships and Awards

NUS FASS Faculty Teaching Excellence Award, 2017.

Outstanding Author Contribution Award at the Emerald Literati Network Awards for Excellence, 2013

Dean's Fellowship, Boston University, 2007-2012

Postgraduate Research Award, Trinity College Dublin, 2006

Terance Gorman Prize, Trinity College Dublin, 2006

## Referee Experience

Journal of Econometrics, Journal of Monetary Economics, Journal of Applied Econometrics, Journal of Economic Dynamics & Control, Studies in Nonlinear Dynamics & Econometrics, Journal of Econometric Methods, Statistics & Probability Letters, Energy Journal, Entropy.

## Seminar and Conference Presentations

2018 Academia Sinica, The 2018 Shandong Econometrics Conference (Jinan, China), Bayesian Computation for High-Dimensional Statistical Models workshop (Institute for Mathematical Sciences, NUS, scheduled)

2017 Hong Kong University of Science and Technology
2015 The 5th Shanghai Econometrics Workshop (Shanghai, China), BK21 and Korean Economic Group International Conference on Recent Advances in Econometrics at Korea University (Seoul, Korea)

2014 The 10th Symposium on Econometric Theory and Applications (Taipei, Taiwan), National Bank of Poland workshop "Identification in Macroeconomics" (Warsaw, Poland)

2013 ASSA Meetings (San Diego, CA), Birmingham Macroeconomics and Econometrics Conference (Birmingham, UK), Asian Meeting of the Econometric Society (Singapore), Shanghai University of Finance and Economics

2012 National University of Singapore

2011 Western Economic Association International (WEAI) 86th Annual Conference and Graduate Student Workshop (San Diego, CA), Royal Economic Society (RES) Conference (London, UK), 10th Annual Advances in Econometrics Conference on DSGE Modeling (Dallas, TX), Boston University-Boston College Mini Conference in Econometrics

## LANGUAGES

Russian (native), English (fluent), French (intermediate)

## COMPUTER SKILLS

STATA, MATLAB, R, Python, Julia, Scientific WorkPlace, LaTeX, Eviews, Microsoft Office