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Personal Information:

Date of birth: June 1st, 1994
Gender: Male
Citizenship: Chinese

Undergraduate Studies:

Bachelor of Economics, School of Economics, Zhejiang University, 2013-2017.

Graduate Studies:

Singapore Management University, 2017-present
Thesis Title: Essays on Long Memory Time Series and Panel Models
Expected Completion Date: June, 2022

Thesis Committee and References:

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Teaching and Research Fields:

Primary fields: Econometric Theory

Secondary fields: Financial Econometrics and Macroeconomics

Teaching Experience:

Teaching Assistant, School of Economics, Singapore Management University
2021: Advanced Time Series Analysis (PhD, by Prof. Peter C.B. Phillips)
2018-2020: Macroeconomics I (PhD, by Prof. Nicolas Jacquet and Prof. Thomas J. Sargent)
2018: Intermediate Macroeconomics (undergraduate, by Prof. Sun Yu Juliana)

Research Experience:

Research Assistant for Prof. Liangjun Su, 2019
Research Assistant for Prof. Meina Cai on "Land Commodification and *hukou* Policy Innovation in China: Evidence from A Survey Experiment", 2015

Conference and Seminar Presentations:

Econometric Research Workshop, Singapore Management University, 2018

Honors, Scholarships, and Fellowships:

Doctoral Scholarship, Singapore Management University, 2017-2021
Best First Year Student Award, PhD in Economics, Singapore Management University, 2017
National Scholarship, Chinese Department of Education, 2014

Referee Service:

Journal of Econometrics, Econometric Reviews

Working Papers:

"Unified Factor Model Estimation and Inference under Short and Long Memory" with Peter C. B. Phillips and Liangjun Su (Job market paper)

Abstract: This paper studies a panel linear regression model with interactive fixed effects wherein regressors, factors and idiosyncratic error terms are all stationary but with potential long memory. The setup involves a new factor model formulation for which weakly dependent regressors, factors and innovations are embedded as a special case. Standard methods based on principal component decomposition and least squares estimation, as in Bai (2009), are found to suffer bias correction failure because the order of magnitude of the bias is determined in a complex manner by the memory parameters. To cope with this failure and to provide a simple implementable estimation procedure, frequency domain least squares estimation is proposed. The limit distribution of this frequency domain approach is established and a hybrid selection method is developed to determine the number of factors. Simulations show that the frequency domain estimator is robust to short memory and outperforms the time domain estimator when long range dependence is present. An empirical illustration of the approach is provided, examining the long-run relationship between debt and economic growth.

"Time-Varying Regression with Long Memory" with Liangjun Su

Abstract: In this paper we consider a time-varying regression model in time series where both regressors and error term are locally stationary long memory processes with time-varying memory parameters. A frequency domain least squares estimator is adopted with kernelized discrete Fourier transform. We derive its pointwise asymptotic normality and uniform convergence rate. And a specification test on constancy of coefficients is provided, together with a frequency domain bootstrap to estimate the asymptotic covariance and improve the finite sample performance. For simplicity of

implementation, a self-normalized inference scheme is provided. Monte Carlo simulations show that both the estimator and test perform well in finite samples. A real data application in terms of international spillover effects of inflation rate across European countries is conducted.

Working in Progress:

"Tensor Decomposition and Linear Regressions with Latent Group Structure" with Liangjun Su

Abstract: This paper studies a linear mixture regression model in a cross-sectional data, where coefficients are heterogeneous across individuals in a finite group pattern. We estimate the discrete group distribution instead of group identity for each individual using a robust tensor power method, where eigenvalues and eigenvectors of a high-dimensional matrix correspond to group distribution and regression coefficients in each group. To improve the finite sample performance an EM-algorithm is adopted with initial coefficients being results of tensor decomposition.

Computer Skills: Stata, Matlab

Languages: English (fluent), Chinese (native)