Wuyi Wang

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Education

- Ph.D. in Economics, Singapore Management University, Singapore, expected 2018. *Committee*: Liangjun Su (Chair), Peter C. B. Phillips, Sainan Jin.
- M.A. in Economics, Wuhan University, China, 2010.
- B.S. in Management Science and Engineering, Zhejiang University, China, 2007.

Fields of Interest

Econometric Theory, Applied Econometrics.

Fellowships, Honors, and Awards

Doctoral Fellowship, School of Economics, Singapore Management University, 2013–2017. Best First Year Student, School of Economics, Singapore Management University, 2014.

Research

Job Market Paper

"Identifying Latent Group Structures in Nonlinear Panels," with Liangjun Su, submitted.

Abstract: We propose a procedure to identify latent group structures in nonlinear panel data models where some regression coefficients are heterogeneous across groups but homogeneous within a group and the group number and membership are unknown. To identify the group structures, we consider the order statistics for the preliminary unconstrained consistent estimators of the regression coefficients and translate the problem of classification into the problem of breaks detection. Then we extend the sequential binary segmentation algorithm of Bai (1997) for breaks detection from the time series setup to the panel data framework. We demonstrate that our method is able to identify the true latent group structures with probability approaching one and the post-classification estimators achieve oracle efficiency. The method has the advantage of more convenient implementation compared with some alternative methods, which is a desirable feature in nonlinear panel applications. To improve the finite sample performance, we also consider an alternative version based on the spectral decomposition of certain estimated matrix and link the group identification issue to the community detection problem in the network literature. Simulations show that our method has good finite sample performance. We apply this method to explore how individuals' portfolio choices respond to their financial status and other characteristics using the Netherlands household panel data from year 1993 to 2015, and find three latent groups.

Working Papers

"Homogeneity Pursuit in Panel Data Models: Theory and Applications," with Peter C. B. Phillips and Liangjun Su, under revision.

"Strong Consistency of Spectral Clustering for Stochastic Block Models," with Liangjun Su and Yichong Zhang, submitted.

Work in Progress

"Heterogeneous Coefficient Spatial Models with Interactive Effects and Latent Structures," with Liangjun Su and Vanessa Smith.

Conference Presentations

The 2017 China Meeting of the Econometric Society, Wuhan University, China, June 9–11, 2017.

The 1st International Conference on Econometrics and Statistics, Hong Kong University of Science and Technology, Hong Kong, June 15–17, 2017.

Referee for

Journal of Econometrics, Econometric Reviews, Econometric Theory.

Teaching Assistant

Singapore Management University, Ph.D. Econometrics I, Liangjun Su and Sainan Jin, Fall 2014. Singapore Management University, Ph.D. Econometrics I, Liangjun Su and Sainan Jin, Fall 2015. Singapore Management University, Ph.D. Time Series Econometrics II, Peter C. B. Phillips, Spring 2017.

Skills

Computer programming: MATLAB, R, Python, LATEX. *Languages*: English (fluent), Chinese (native).

References

Liangjun Su Professor of Economics Singapore Management University +65 6828 0386 ljsu@smu.edu.sg

Sainan Jin Professor of Economics Singapore Management University +65 6828 0431 snjin@smu.edu.sg Peter C. B. Phillips Professor of Economics and Statistics Yale University +1 (203) 432-3695 peter.phillips@yale.edu

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