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Contact Information
School of Economics
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Academic Position:
Adjunct Faculty in Economics, Singapore Management University, 2022 to present

Undergraduate Studies:
B.A., Finance, School of Economics and Management, Wuhan University, 2013

Masters Level Work:
M.Phil., Finance, School of Economics and Management, Wuhan University, 2016
Supervisor: Professor Chun JIANG

Graduate Studies:
Ph.D., Economics, School of Economics, Singapore Management University, 2021
Thesis Title: Three Essays on Nonstationary Financial Econometrics

Thesis Committee:

Jun Yu (Chair)
Lee Kong Chian Professor of Economics and Finance
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Shuping Shi
Professor of Economics
School of Economics
Macquarie University
North Ryde, NSW 2109
Australia
Phone: +61 2 9850 8501
Email: shuping.shi@mq.edu.au

Teaching and Research Fields:
Primary fields: Financial Econometrics, Econometric Theory
Secondary fields: Applied Econometrics, Applied Macroeconomics, Time series Econometrics

Teaching Experience:

Instructor:

2021 Introduction to Econometrics (Undergraduate)
2019 Math Camp IA (Ph.D.)
2018 Math Camp IA (Ph.D.)

Teaching Assistant:

2020 Introduction to Econometrics
2017 Human Capital and Economics of Education
2016 Introductory Statistics

Teaching Certificate:

Certificate for graduate instructor, Center for English Communication, SMU

Research Experience:

Singapore Management University, Singapore *Jun 2019 – Sep 2019*

Research Assistant

Assist in organizing and processing interviews with Presidents and Deans from top universities; Write relevant reports supported by the Blue Ribbon Program from Graduate School of Singapore Management University

Wuhan University, China *Jun 2013 – Jun 2016*

Research Assistant

Undertake research projects in the area of international finance, supported by National Natural Science Foundation of China (No. 71373187)

Honors, Scholarships, and Fellowships:

2016-2020	Presidential Doctoral Fellowship, Singapore Management University
2013	Outstanding Graduates Awards, Wuhan University
2012	Second Prize of National English Competition for College Students, CETRAC
2012	First Price Scholarship (Top 5%), Wuhan University
2010	National Scholarship (Top 1%), Ministry of Education

Research Papers:

"Robust Inference with Functional Deviations from Unity in Predictive Regression" with Yanbo Liu and Peter Phillips, Corresponding author

Abstract: This study explores inference procedures for predictive regressions with time-varying deviations from unity. Specifically, we extend the self-generated instrumentation, called IVX, to incorporate persistent regressors of functional local-to-unity, functional mildly explosive, and functional mildly stationary roots. The asymptotic distributions of IVX estimators under time-varying parameters are novel and nonpivotal but again lead to pivotal distributions of corresponding Wald statistics that remain robust across various roots. The numerical experiments justify the robustness of IVX testing procedures in the finite sample. We also verify the existence of time-varying coefficients and the predictability of fundamentals with such unstable parameters by using the S&P 500 data.

"Nonparametric Estimation and Inference for Functional Local-to-unity Processes" with Yanbo Liu

Abstract: This paper proposes a functional local-to-unity model with autoregressive coefficients that vary smoothly over time. Two sieve estimators, namely a time series and a panel autoregression estimators, are considered to estimate the local-to-unity function. The property of consistency is established. Besides, a consistent specification test to detect parameter instability is proposed. Numerical simulations demonstrate the finite sample performance of the specification test. Finally, we apply the panel estimator and specification test to the price index of China's real estate market and obtain significant empirical results in

measuring time-varying growth rates in the data.

"Robust Inference for Time-varying Predictability: A Sieve-IVX Approach" with Yanbo Liu and Nan Liu

Abstract: The predictive regression models are the main workhorses for testing the predictability of fundamental variables on stock returns. The relevant inference theory of predictive regressions is mainly discussed by assuming parameter constancy or the piecewise-constancy in slope coefficients. However, the parametric inference methods are prone to the model misspecifications, can lead to severe size distortions, and further induce a high chance of spurious predictability. This paper investigates a semi-parametric predictive regression model with mixed-root regressors and time-varying coefficients evolving smoothly over time. Moreover, a novel variant of the self-generated instrument, called Sieve-IVX, is proposed, which attains robust inference for time-varying predictability irrespective of various degrees of persistence. This paper establishes the consistency and asymptotic normality of the Sieve-IVX estimator and provides two corresponding Wald test statistics for predictability inference and model specifications. Besides, the proposed Sieve-IVX-Wald tests converge to chi-square distributions under the related null hypotheses. Monte Carlo simulations show the well-behaved finite-sample performance of the presented test statistics. The IVX-Sieve-Wald tests are also applied to the S&P 500 excess returns and successfully detect the evidence of time-varying predictability.

Computer Skills:

MATLAB, R, Python, Stata, EViews, Latex

Languages:

English (Fluent), Mandarin (Native)