Jianhan Zhang

https://jianhzhang.github.io
Address: 50 Stone Rd E, Guelph, ON Canada; N1G 2W1
E-mail: jzhang56@uoguelph.ca *Phone:* +1-519-731-4389

Research fields *Last updated:* October 16, 2023

Primary: Econometric theory; Secondary: Applied Econometrics, Financial Econometrics.

Education

PhD in Economics Sep 2019 - Aug 2024(expected)
University of Guelph(Canada)
Committee: Thanasis Stengos(Chair), Yiguo Sun, Hong Li
Thesis title: "Endogeneity on Threshold Regression Model"
M.A in Economics Sep 2016 - Aug 2019
Central University of Finance and Economics(China)
BA in Economics Sep 2012 - May 2016
Anhui University of Finance and Economics(China)

Working papers

Endogeneity kink threshold regression model *(Job market paper)*
Jianhan Zhang, Chaoyi Chen, Yiguo Sun and Thanasis Stengos *Resubmitted to JBES*

- This paper considers an endogenous kink threshold regression model with an unknown threshold value in a time series as well as a panel data framework, where both the threshold variable and regressors are allowed to be endogenous. We construct our estimators from a nonparametric control function approach and derive the consistency and asymptotic distribution of our proposed estimators. Monte Carlo simulations are used to assess the finite sample performance of our proposed estimators. Finally, we apply our model to analyze the impact of COVID-19 cases on labor markets in the US and Canada.

Threshold regression model with mismeasured variables
Jianhan Zhang, Yiguo Sun

- We explore a threshold regression model that accommodates potential measurement errors in the regressors, offering valuable insights for the firm's investment model. It is imperative to account for both the mismeasurement of Tobin's Q and the potential threshold effects arising from financial constraints. In the field of econometric theory, we enhance the conventional linear model by incorporating a threshold structure and employing the robust estimator known as the Median of Means (MoM). This approach is designed to address potential issues associated with heavy-tailed data distributions.

Endogeneity kink threshold regression model with linear control function
Jianhan Zhang, Chaoyi Chen, Yiguo Sun and Thanasis Stengos

- In this paper, we extend Hansen(2017) by allowing the endogeneity in a kink threshold regression model. We apply the linear control function approach and both the threshold variable and regressors are allowed to be endogeneity.

Work in progress

Robust GMM estimator of errors-in-variables model
Jianhan Zhang, Yiguo Sun

Projects

Research Assistant

Dr. Thanasis Stengos	S21; W22; W23; S23
Dr. Yiguo Sun	F22
Dr. Kurt Annen	S21
Dr. Fred Liu	S22
Dr. Hong Li	F23

Book revision F20-F21
with Prof. Ray Rees(LMU) and Prof. Mike Hoy Mathematics for Economics 4ed

Referee

Empirical Economics ×2

Teaching interests

Graduate *Econometrics Theory, Applied Econometrics*

Undergraduate *Statistics, Econometrics, Financial Econometrics*

Teaching

Lecturer for Economic Statistics(ECON2740) *F23 [Syllabus]*

Conference

Economic students workshop(Guelph) *W22/W23*

38th Canadian Econometrics Study Group Annual Meeting *F23*

Technical skills

Tools R, Matlab, Python, Gauss, LaTeX

Language

English Fluent
Chinese Native

References

Dr. Thanasis Stengos(Chair)
Professor of Economics
University of Guelph
tstengos@uoguelph.ca
+1-519-824-4120×53917

Dr. Yiguo Sun
Professor of Economics
University of Guelph
yisun@uoguelph.ca

+1-519-824-4120×58948

Dr. Hong Li
Professor of Economics
University of Guelph
lihong@uoguelph.ca
+1 519-824-4120×58946