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 24, 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

- In this article, we consider a threshold regression model with possibly mismeasured regressors. Following Lewbel (2012), we employ error heteroskedasticity to construct valid moment conditions. This method proves especially useful when instrumental variables or other side information are missing or unreliable. We propose a two-step GMM estimator as well as a robust estimator based on the median of means method to overcome possible heavy-tailed problems. We apply our approach to investigate the potential threshold relationship among investment, Tobin's q, and cash flow.

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 endogenous.

Work in progress

Robust GMM estimator of errors-in-variables model

Jianhan Zhang, Yiguo Sun

Threshold regression model with non-classical measurement errors
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