

Jianhan Zhang

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Research field

Last updated: October 2, 2023

Econometric theory; Threshold regression; Semi-/nonparametric;

Education

PhD in Economics, University of Guelph

Sep 2019 - Aug 2024(expected)

Committee: [Thanasis Stengos](#), [Yiguo Sun](#)

Thesis title: "Endogeneity on Threshold Regression Model"

M.A in Economics

Sep 2016 - Aug 2019

Central University of Finance and Economics

BA in Economics

Sep 2012 - May 2016

Anhui University of Finance and Economics

Working paper

Threshold regression model with mismeasured variables

[Jianhan Zhang](#), [Yiguo Sun](#)

- We consider a threshold regression model with possible mismeasured regressors, which is useful for the firm's investment model, as the mismeasurement of Tobin's Q and the possible threshold effect that comes from financial constraints should not be ignored. In econometric theory, we extend the existing linear model by allowing threshold structure and an MoM (Median of Means) robustness estimator to overcome the possible heavy-tailed problem.

Endogeneity kink threshold regression model

Prepare for resubmitting at [JBES](#)

[Jianhan Zhang](#), [Chaoyi Chen](#), [Yiguo Sun](#) and [Thanasis Stengos](#)

- In this paper, we solve the possible endogeneity problem in a kink threshold regression model, where both the threshold variable and regressors are allowed to be endogeneity. We apply a two-step Sieve LS estimation and establish a root-n convergence of the parametric estimators(linear coefficients and threshold parameters). Using our model to measure the possible threshold effect of COVID-19 on North America's labor market, we find the negative impact being statistically severe only after the number of COVID-19 cases is above a certain level.

Working in progress

Robust GMM estimator of errors-in-variables model

[Jianhan Zhang](#), [Yiguo Sun](#)

Projects

Research Assistant

Prof. Thanasis Stengos

S21; W22; W23; S23

Prof. Yiguo Sun

F22

Prof. Kurt Annee(UOG)

S21

Prof. Fred Liu(UOG)

S22

Prof. Hong Li(UOG)

F23

Book revision
with Prof. Ray Rees(LMU) and Prof. Mike Hoy(UOG)

F20-F21
Mathematics for Economics 4ed

Referee

Empirical Economics ×2

Teaching interests

Undergraduate *Economic Statistics/ Introduction to Econometric/Financial Econometrics*

Graduate *Econometrics Theory/ Applied Econometrics*

Teaching

ECON2740 Economic Statistics *F23(lecturer)*

Conference

Economic students work shop(Guelph) *W22/W23*

38th Canadian Econometrics Study Group Annual Meeting *F23*

Technical skills

Tools R, Matlab, Python, Gauss, L^AT_EX

Language

Chinese Native

English Fluent

References

Professor [Thanasis Stengos](#)(Chair)

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Professor [Yiguo Sun](#)

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Professor [Hong Li](#)

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