

Hongqiang Yan

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EDUCATION

Ph.D. in Economics, North Carolina State University, Raleigh, NC 2018 – Present

- Dissertation: *"Uniform Inference in High-dimensional Threshold Regression Models with Application on Agricultural Market Integration "*
- Committee: Profs. Mehmet Caner (Chair), Barry Goodwin, Zheng Li, & Ilze Kalnina

M.S. in Economics, Texas A&M University, College Station, TX 2016 – 2018

B.S. in Finance, Beijing Jiaotong University, Beijing, China 2012 – 2016

RESEARCH FIELDS

Econometrics, Applied Econometrics, Agricultural Economics

JOB MARKET PAPER

"Uniform Inference in High-dimensional Threshold Regression Models"

- **Abstract:** This paper addresses statistical inference for high-dimensional threshold regression parameters. We establish oracle inequalities for the scaled Lasso estimator proposed by Lee, Seo, and Shin, assuming only non-subgaussian error terms and covariates. Subsequently, we desparsify (or debias) the scaled Lasso estimator and derive the asymptotic distribution of tests involving an increasing number of slope parameters. Utilizing these results, we construct asymptotically valid confidence intervals for the components of the threshold regression slope coefficients. To complement our asymptotic theory, we conduct simulation studies to demonstrate the performance of our method in finite samples.

WORKING PAPERS

"Investigating Integration and Exchange Rate Pass-Through in World Maize Markets Using Post-Selection Inference," with Barry Goodwin, & Mehmet Caner

- **Abstract:** This paper investigates the extent of market integration in the world markets for maize. To address the shortcomings of existing models on spatial market integration, we adopt an approach towards inference and model selection using the desparsified LASSO method for high-dimensional threshold regression. Our results support the integration of global corn markets, especially when the existence of thresholds is accounted for. We identify important relationships between several variables representing domestic and world economic conditions.

"Non-parametric Estimation of Risk Preferences," with Xiaoyong Zheng & Zheng Li

WORK IN PROGRESS

"Effects of Soil Erosion on Mean Yield and Yield Risk," with Roderick Rejesus, Serkan Aglasan, & Zheng Li

"Post-Selection Inference in Panel Data Models with Multiple Structural Changes"

"Cover Crop Adoption and Crop Yield: An Application of Double Machine Learning," with Roderick Rejesus

TEACHING EXPERIENCE

Independent Instructor, NC State University	2023
<ul style="list-style-type: none">Principles of Microeconomics: Spring 2023	
Graduate Teaching Assistant, NC State University	2018 – 2023
<ul style="list-style-type: none">Fundamentals of Microeconomics (Master-Level): Fall 2020, 2021, 2022<ul style="list-style-type: none">* summer math camp and recitationsApplied Econometrics I (Master-Level): Fall 2018, 2020, 2021<ul style="list-style-type: none">* recitationsIntroduction to Commodity Futures Markets: Fall 2022Microeconomic II (Doctoral-Level): Spring 2020Introduction to Econometric Methods (Master-Level): Spring 2020Principles of Microeconomics: Spring 2022, Fall 2019Public Finance: Spring 2019	

FELLOWSHIPS, AWARDS AND GRANTS

Goodnight Doctoral Fellowship, NC State University	2022– Present
<ul style="list-style-type: none">Selected as one of 30 outstanding doctoral students at NC State UniversityGuaranteed up to four years	
Jenkins Fellowship, NC State University	2023
Economics Graduate Scholarship, Texas A&M University	2016, 2017

PRESENTATIONS

AAEA Annual Meeting (Washington, DC)	2023
Midwest Econometrics Group Conference (East Lansing, MI)	2022

SERVICE

Organizer for econometrics graduate students group meetings, NC State University	2021– 2022
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OTHER INFORMATION

Programming: R, Python, MATLAB, SAS

Language: English(fluent), Mandarin Chinese(native)

Citizenship/VISA Status: China/F1

REFERENCES

Prof. Mehmet Caner (Ph.D Committee Chair)
Thurman-Raytheon Distinguished Professor
Dept. of Economics
NC State University, Raleigh, NC
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Prof. Zheng Li
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William Neal Reynolds Distinguished Professor
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