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Contact Information

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Personal Information:

9 Nov 1992, Male, Singaporean

Undergraduate Studies:

Banking and Finance, University of London, Singapore, 2016

Masters Level Work:

Masters in Applied Economics, Singapore Management University, 2019

Graduate Studies:

Singapore Management University, starting year to present (2019-2024)
Thesis Title: Essays in Weak Identification
Expected Completion Date: May 2024

Thesis Committee and References:

Zhang Yichong (Chair)

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Wang Wenjie

School of Economics
Nanyang Technological University
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Teaching and Research Fields:

Primary fields: Econometric Theory
Secondary fields: Weak Identification, Dimensionality Asymptotics

Teaching Experience:

1. Teaching assistant (TA) for ECON611 Econometrics I (PhD level), 2022-2024, Singapore Management University. Instructor: Zhang Yichong
2. TA for ECON 107 Introduction to Econometrics (Undergraduate), 2023-2024, Singapore Management University. Instructor: Chow Hwee Kwan
3. TA for ECON 217 Macroeconomics of Income Distribution (Undergraduate), 2021-2022, Singapore Management University. Instructor: Ho Kong Weng
4. TA for COR 2100 Economics and Society (undergraduate), 2021-2022, Singapore Management University. Instructor: Ho Kong Weng
5. Taught the Masters of Science in Economics programme's Math camp, 2020, Singapore Management University

Research Experience:

Research assistant for Chow Hwee Kwan, Singapore Management University, 2018

Professional Activities:

Referee for Econometric Theory

Conference and Seminar Presentations:

1. Presented at SH3 Conference on Econometrics, Singapore Management University, 2023
2. Attended Volatility Conference, Singapore Management University, 2023
3. Attended the 17th International Symposium on Econometric Theory and Applications (SETA), 2023
4. Attended MPSS (Monash-Princeton-SJTU-SMU) Conference in Econometrics, 2023

Honors, Scholarships, and Fellowships:

1. Roberto S. Mariano Top MAE Student Award, 2019
2. Association of Chartered Certified Accountants (ACCA) Silver award, 2016

Publications:

1. A Conditional Linear Combination Test with Many Weak Instruments, with Zhang Yichong and Wang Wenjie, **Journal of Econometrics**, forthcoming

Research Papers:

“A Valid Anderson-Rubin Test under Both Fixed and Diverging Number of Weak Instruments” (Job Market Paper)

Abstract: The conventional and jackknife Anderson-Rubin (AR) Tests are developed separately to conduct weak-identification-robust inference when the number of instrumental variables (IVs) are fixed or diverging to infinity with the sample size, respectively. These two tests compare distinct test statistics with distinct critical values. To implement them, researchers first need to take a stance on the asymptotic behaviour of the number of IVs, which is ambiguous when this number is just moderate. Instead, in this paper, we propose two analytical weak-identification-robust AR tests, both of which control asymptotic size whether the number of IVs are fixed or diverging. We further analyze the power properties of these uniformly valid AR tests under both cases.

“A Conditional Linear Combination Test with Many Weak Instruments”

Abstract: We consider a linear combination of jackknife Anderson-Rubin (AR), jackknife Lagrangian multiplier (LM), and orthogonalized jackknife LM tests for inference in IV regressions with many weak instruments and heteroskedasticity. Following I.Andrews (2016), we choose the weights in the linear combination based on a decision-theoretic rule that is adaptive to the identification strength. Under both weak and strong identifications, the proposed test controls asymptotic size and is admissible among certain class of tests. Under strong identification, our linear combination test has optimal power against local alternatives among the class of invariant or unbiased tests which are constructed based on jackknife AR and LM tests. Simulations and an empirical application to Angrist and Krueger’s (1991) dataset confirm the good power properties of our test.

Computer Skills:

R Programming

Matlab

Stata

LaTeX

Languages:

English (Fluent)

Chinese (Fluent)