Wonwoo Bae

Contact Information

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Education

Mar. 2021 - Aug. 2023 (Expected)	M.A. in Economics **Seoul National University**
Mar. 2015 - Feb. 2021	B.A. in Economics, B.S. in Mathematical Sciences, *Summa Cum Laude* **Seoul National University** (Mandatory Military Service: Feb. 2017 - Feb. 2019)

Research Interests

Econometrics, Behavioral Economics, Macroeconomics, Experimental Economics

Research

Working Paper

Testing for Almost Stochastic Dominance
Joint work with Yoon-Jae Whang

We propose a nonparametric test for the null hypothesis of almost stochastic dominance (ASD). The traditional stochastic dominance (SD) rule ranks distributions for *all* utility functions in a certain class, which can be restrictive in practice. To circumvent the limitation of the SD rule, Leshno and Levy (2002) developed the ASD rule that applies to *most* rather than *all* decision makers by eliminating economically pathological preferences. The ASD rule can be applied to many empirical economic problems including investment decisions and policy evaluations. Despite its usefulness, to the best of our knowledge, there has been no formal test of ASD available in the literature. In this paper, we propose an L_p-type test statistic based on empirical distribution functions and introduce bootstrap procedures to compute the critical values. We investigate the finite sample performance of the testing procedures by a set of Monte Carlo simulation experiments. We apply our test to compare the return distributions of stocks and bonds over different investment horizons. The ASD tests support the popular practice of adjusting the portfolios of stocks and bonds based on the investment horizons.

Work in Progress

Diagnostic Global Game: Theory and Experiment
Joint work with Syngjoo Choi and Jeongbin Kim

We introduce diagnostic expectations into a standard coordination game with incomplete information called global game. Diagnostic expectations proposed by Bordalo et al. (2018) capture excess volatility in belief updating. The equilibrium threshold and uniqueness conditions change compared with the benchmark global game with Bayesian updating due to diagnosticity. We test diagnostic expectations in a belief updating problem and predictions of the diagnostic global game model experimentally. In our experimental design, we include a novel treatment to capture the mechanism behind diagnostic expectation, motivated by the micro-foundation of diagnostic expectations in Bordalo et al. (2022).

Work in Progress | Measuring Inflation Expectations Using Big Data
Joint work with Bumrak Choi, Dong Ook Choi, Yoon-Jae Whang, and Chamna Yoon

Work in Progress | Inflation Expectations and Central Bank Communication
Joint work with Syngjoo Choi, In Do Hwang, Young Sik Kim, and Ohik Kwon

Research Experience

June 2020 - Aug. 2023 | Research Assistant for Professor Yoon-Jae Whang
- Estimation of Producer Price Index (Stata)
- Collusion Detection Analyses (Stata)
- Simulation for "Testing Stochastic Dominance with Many Conditioning Variables" by Oliver Linton, Myung Hwan Seo, and Yoon-Jae Whang (MATLAB)

May 2022 - Aug. 2023 | Research Assistant for Professor Syngjoo Choi
- Literature Review and Survey Experiments Design for "Inflation Expectations and Central Bank Communication"

Teaching Experience

Fall 2022 | Teaching Assistant for Econometrics
Professor Yoon-Jae Whang (Seoul National University)

Fall 2021 | Teaching Assistant for International Finance
Professor Woong Yong Park (Seoul National University)

Spring 2021 | Teaching Assistant for Microeconomics
Professor Son-Ku Kim (Seoul National University)

Conference Presentation

July 2022 | The 16th International Symposium on Econometric Theory and Applications
- "Testing for Almost Stochastic Dominance"

Honors, Scholarships, and Fellowships

2023 - 2024	Doctoral Study Abroad Scholarship, *Korea Foundation for Advanced Studies*
Fall 2022	TA Scholarship, *Seoul National University*
Spring 2022	Brain Korea 21 (BK21) Research Scholarship, *National Research Foundation of Korea*
2022	Graduate Research Fellowship, *College of Social Sciences, Seoul National University* - "Testing for Almost Stochastic Dominance"
2021	Brain Korea 21 (BK21) Research Excellence Fellowship (conferred to distinguished first-year graduate students), *National Research Foundation of Korea* Brain Korea 21 (BK21) Research Fellowship Award (conferred to distinguished first-year graduate students), *National Research Foundation of Korea*
2020	Undergraduate Research Grant, *College of Social Sciences, Seoul National University* - "Business Cycle Implications of Household Debt and Mortgage Debt"
Winter 2019	Undergraduate Research Grant, *College of Natural Sciences, Seoul National University* - "Derivation of Greeks in the Heston Volatility Model using Malliavin Calculus"
2016 - 2020	Bang Il-Young Full Scholarship (with monthly stipends), *Bang Il-Young Foundation*
Fall 2015	Merit-Based Full Scholarship, *Seoul National University*
Spring 2015	Megastudy Full Scholarship, *Megastudy Scholarship Foundation*

Skills

Programming: Python, MATLAB, R, Stata (Fluent), C++ (Basic), oTree, LaTeX
Language: English (Fluent), Korean (Native), French, German, Chinese (Basic)

Personal Information

Date of Birth: October 16th, 1996
Citizenship: Republic of Korea

References

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