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## Curriculum Vitae Wonwoo Bae

### Contact Information

Department of Economics  
Seoul National University  
1 Gwanak-ro, Gwanak-gu  
Seoul 08826, Republic of Korea

Phone: +82 10-2671-1646  
Email: [bww1016@snu.ac.kr](mailto:bww1016@snu.ac.kr)

**Personal Information:** OCT/16/1996, Male, South Korean Citizen

### Education:

M.A., Economics, Seoul National University, 2021 – present  
B.A., Economics, B.S., Mathematics, Seoul National University, *Summa Cum Laude*, 2015 – 2021  
(Mandatory Military Service, 2017 – 2019)

### References:

Professor Yoon-Jae Whang  
Seoul National University  
+82 2-880-6362  
[whang@snu.ac.kr](mailto:whang@snu.ac.kr)

Professor Syngjoo Choi  
Seoul National University  
+82 2-880-4109  
[syngjooc@snu.ac.kr](mailto:syngjooc@snu.ac.kr)

Professor Jae Won Lee  
Seoul National University  
+82 2-880-6368  
[jwlee7@snu.ac.kr](mailto:jwlee7@snu.ac.kr)

### Research Interests:

Econometrics, Behavioral Economics, Experimental Economics, Macroeconomics

### Research Experience:

2020 – present    RA for Professor Yoon-Jae Whang  
2022 – present    RA for Professor Syngjoo Choi  
                      - “Inflation Expectations and Central Bank Communication” (with Syngjoo Choi, In Do Hwang, Young Sik Kim, and Ohik Kwon)  
Fall 2021        RA for Professor Yoon-Jae Whang and Professor Myung Hwan Seo  
                      - “Testing Stochastic Dominance with Many Conditioning Variables” (Oliver Linton, Myung Hwan Seo, and Yoon-Jae Whang)

### Teaching Experience:

Fall 2022        Econometrics, TA for Professor Yoon-Jae Whang  
Fall 2021        International Finance, TA for Woong Yong Park  
Spring 2021     Microeconomics, TA for Son-Ku Kim

### Conference Presentation:

The 16th International Symposium on Econometric Theory and Applications (SETA2022)  
- “Testing for Almost Stochastic Dominance” (with Yoon-Jae Whang)

### Honors and Awards:

2022            Graduate Research Fellowship, *College of Social Sciences, Seoul National University*  
                      - “Testing for Almost Stochastic Dominance” (with Yoon-Jae Whang)  
2021            Brain Korea 21 (BK21) Research Fellowship Award  
2020            Undergraduate Research Grant, *College of Social Sciences, Seoul National University*

- “Business Cycle Implications of Household Debt and Mortgage Debt”  
guided by Professor Soyoung Kim
- Winter 2019 Undergraduate Research Grant, *College of Natural Sciences, Seoul National University*
- “Derivation of Greeks in the Heston Volatility Model using Malliavin Calculus” guided by Professor Hyunbin Park

### **Scholarships and Fellowships:**

2023 -	Doctoral Study Abroad Scholarship, <i>Korea Foundation for Advanced Studies</i>
Fall 2022	TA Scholarship, <i>Seoul National University</i>
Spring 2022	Brain Korea 21 (BK21) Research Scholarship, <i>National Research Foundation of Korea</i>
2021	Brain Korea 21 (BK21) Research Excellence Fellowship (for distinguished first-year students), <i>National Research Foundation of Korea</i>
2016 – 2020	Bang Il-Young Full Scholarship (with monthly stipends), <i>Bang Il-Young Foundation</i>
Fall 2015	Merit-Based Full Scholarship, <i>Seoul National University</i>
Spring 2015	Megastudy Full Scholarship, <i>Megastudy Scholarship Foundation</i>

### **Research Papers:**

“Testing for Almost Stochastic Dominance” (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 p-values. We investigate the finite sample performance of the bootstrap critical values by a set of Monte Carlo simulations. 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 advising higher stock to bond ratios for long investment horizons.

### **Research Paper in Progress**

“Diagnostic Global Game: Theory and Experiment” (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).

“Inflation Expectations and Central Bank Communication” (with Syngjoo Choi, In Do Hwang, Young Sik Kim, and Ohik Kwon)

“Measuring Inflation Expectations using Big Data” (with Bumrak Choi, Dong Ook Choi, Yoon-Jae Whang, and Chamna Yoon)

### **Others**

Programming Python, MATLAB, R, Stata (Fluent), C++ (Basic), oTree, LaTeX

Language	English (Fluent), Korean (Native), French, German, Chinese (Basic)
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