

Byeong-Hak Choe

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CURRENT POSITION

Aug 2023–present Assistant Professor of Data Analytics and Economics, School of Business, SUNY Geneseo.

PREVIOUS EMPLOYMENT

Aug 2021–Aug 2023 Lecturer in Data Analytics, School of Business, SUNY Geneseo.

EDUCATION

| Degree | Field | Institution | Year |
|-------------------------------------------|------------------------------------|----------------------------------------------------------|------|
| Ph.D. | Economics | University of Wyoming | 2021 |
| M.Sc. | Economics | Arizona State University | 2015 |
| M.A. | Economics | SUNY Stony Brook | 2014 |
| B.Sc., B.A. (<i>Summa cum laude</i>) | Applied Mathematics & Economics | Hanyang University at Ansan (<i>in South Korea</i>) | 2012 |

FIELDS OF INTEREST

Primary Fields Environmental Economics, Climate Change Policy.
Secondary Fields Public Economics, Applied Microeconomics.
Research Methods Causal Inference, Machine Learning, Text Analysis, Economic Theory.

RESEARCH

Working papers

1. *Social Media Campaigns, Lobbying and Legislation: Evidence from #climatechange/#globalwarming and Energy Lobbies.*

Abstract: To what extent do social media campaigns compete with fossil fuel lobbying on

climate change legislation? In this article, I estimate the effect of social media campaigns on a congressperson's legislative activities against climate change actions during the U.S. Congresses (January 2013-January 2019). I find that (1) a 1% increase in the per-capita level of activities of climate change campaigns using Twitter is associated with a decrease Democrats' tendency to support climate-unfriendly legislation by 0.9%, while it is associated with an increase in Republicans' one by 0.2%; and (2) a 1% increase in the fossil fuel industry's lobbying expenditure relative to the rest of industries' lobbying expenditure is associated with an increase in Republicans' tendency to support climate-unfriendly legislation by 1.1%. I also find that negative sentiment in social media campaigns is strongly associated with affecting congresspersons' support for climate-unfriendly legislation.

2. *Climate Finance under Conflicts and Renegotiations: A Dynamic Contract Approach.*

Abstract: Considering climate funds (e.g. the Green Climate Fund) as the financial mechanism to provide funding to developing countries, this paper examines a long-term climate funding relationship between two agents—the rich country and the poor country. Conflicts between the rich and poor countries arise when determining 1) the size of climate funding that the rich country contributes to the poor country, and 2) the funding allocation between climate adaptation and mitigation projects in the poor country. In addition, the rich country cannot be forced to commit contractual contributions to the poor country, and the climate funding relationship can be repeatedly renegotiated. This paper derives the following results: (1) climate funds converge to the first-best in the long-run, in terms of the size of climate funding and its balance between adaptation and mitigation projects, if and only if climate damage becomes *sufficiently* severe. (2) funding allocation between adaptation and mitigation projects becomes more favorable to the poor country if marginal climate costs in the poor country grow faster than in the rich country. (3) fewer conflicts and fewer renegotiations between the rich and poor countries make climate funding contracts more efficient, remedying inequality between the poor and rich countries.

Work in progress

1. *'Hiding Behind a Small Cake' in an Online Dictator Game: The Way You Hide Matters!*, (with Tabaré Capitan (1st author) , Jason Shogren, and Benjamin White).

Abstract: Using an online dictator game in which receivers have incomplete information of the size of the endowment (big or small), the article, "'Hiding behind a small cake' in a newspaper dictator game (Ockenfels and Werner (2012))" shows that a few givers who received the big endowment use their giving to signal they received the small endowment (i.e., to lie). In other words, even though a giver will never meet the corresponding receiver, he cares enough about how he could be perceived by others to lie (i.e., second-order beliefs enters his utility function). In our experiment we provide givers with the opportunity to lie about the size of the endowment without using their giving. Similar to Ockenfels and Werner (2012) we find that (i) few take the opportunity to lie—but those who do give less when their giving is not constrained by its role as a signal—and (ii) givers are more likely to lie when the lie is private. However, using a second stage in the experimental design, we show that liars are the most responsive group of givers to a simple message stating the expectation of the receiver.

RELEVANT POSITIONS

2017–2021 Research Assistant to Prof. Charles Mason, University of Wyoming.

TEACHING

Instructor

| | |
|--------------------------|-------------------------------------------------------------------------|
| Spring 2023, Spring 2022 | DANL 399: Data Analytics Capstone, SUNY Geneseo. |
| Spring 2023, Spring 2022 | DANL 310: Data Visualization and Presentation, SUNY Geneseo. |
| Spring 2023, Fall 2022 | DANL 210: Data Preparation and Management, SUNY Geneseo. |
| Spring 2022, Fall 2021 | |
| Spring 2023, Fall 2022 | DANL 200: Introduction to Data Analytics, SUNY Geneseo. |
| Spring 2022, Fall 2021 | |
| Fall 2022 | DANL 100: Programming for Data Analytics, SUNY Geneseo. |
| Fall 2021 | DANL 300: Advanced Data Analytics, SUNY Geneseo. |
| Summer 2019 | ECON 3010: Intermediate Macroeconomics, University of Wyoming (Online). |

Teaching Assistant

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|--------------------------|-----------------------------------------------------------------------|
| Spring 2020, Spring 2019 | ECON 4430: Energy Economics, University of Wyoming. |
| Spring 2018, Spring 2017 | ECON 3010: Intermediate Macroeconomics, University of Wyoming. |
| Spring 2017 | ECON 1300: Oil: Business, Culture, and Power, University of Wyoming. |
| Fall 2016 | ECON 3020: Intermediate Microeconomics, University of Wyoming. |
| Fall 2015 | ECN 312: Intermediate Microeconomic Theory, Arizona State University. |
| Spring 2011 | BUS 3059: Theory of Investment, Hanyang University at Ansan. |

Grading Assistant

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| Fall 2015 | ECN 312: Intermediate Microeconomic Theory, Arizona State University. |
| Spring 2011 | BUS 3002: Financial Management, Hanyang University at Ansan. |

University Tutor

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| Fall 2019 | EconHelp, Department of Economics, University of Wyoming. |
| Fall 2010 | ECO 2018: Introduction to Statistics, Hanyang University at Ansan. |
| Fall 2009 | ECO 1002: Mathematics for Economists, Hanyang University at Ansan. |

PROFESSIONAL ACTIVITIES

Presentations

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| Jun 2022 | Interdisciplinary Data Science Workshop, Brigham Young University, Provo, Utah. |
| Jun 2021 | Online Seminar, Department of Environmental and Business Economics, University of Southern Denmark. |
| Apr 2019 | University of Wyoming & Colorado State University Economics Graduate Student Symposium, Laramie, Wyoming. |
| Jan 2019 | American Economic Association Annual Meeting (poster session), Atlanta, Georgia. |
| Jul 2018 | The 29 th International Conference on Game Theory, Stony Brook, New York. |

Memberships

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| 2022–present | Southern Economic Association. |
| 2018–present | Association of Environmental and Resource Economists. |
| 2017–present | American Economic Association. |
| 2017–2019 | Econometric Society. |

Services

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| 2021–present | Data Analytics Curriculum Meetings, School of Business, SUNY Geneseo. |
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HONORS, SCHOLARSHIPS & AWARDS

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| 2022 | Advising the SUNY Geneseo team (James Jordan and Jason Rappazzo), Honorable Mention, Business Analytics Competition, Manhattan College. |
| 2020 | Summer Augmentation Scholarship for Ph.D. Dissertation Research, University of Wyoming. |
| 2019 | H. A. True Chair in Petroleum and Economics Scholarship, University of Wyoming. |
| 2019 | John S. Bugas Economics Scholarship, University of Wyoming. |
| 2019, 2018 | Graduate Student Conference Travel Funding, University of Wyoming. |
| 2018 | Ralph d'Arge Scholarship in Natural Resource Economics and Finance, University of Wyoming. |
| 2018 | McMurry Excellence Fund, University of Wyoming. |
| 2018 | Joseph C. and Katherine A. Drew Scholarship, University of Wyoming. |
| 2012 | Highest Grade Point Average in Economics Class of 2012, Hanyang University at Ansan. |
| 2009, 2010 | University Tutor of the Excellent Tutoring Team, Hanyang University at Ansan. |
| 2009–2011, 2006 | Merit-based Scholarships, Hanyang University at Ansan. |

MISCELLANEOUS

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| Computing Skills | Python, R, Stata, MATLAB, Git, SQL, \LaTeX , R Markdown. |
| Languages | English, Korean (native). |
| Citizenship | South Korea. |

NON-ACADEMIC EXPERIENCE

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| 2007–2009 | Completion of Military Obligation, Attained the Rank of Sergeant, Republic of Korea Army, South Korea. |
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REFERENCES

Professor Charles Mason
Department of Economics
University of Wyoming
bambuzlr@uwyo.edu

Assoc. Prof. Thorsten Janus
Department of Economics
University of Wyoming
tjanus@uwyo.edu

Assoc. Prof. Stephen Newbold
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snewbold@uwyo.edu

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