

# Joshua D. Higbee

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## EDUCATION

**University of Chicago** (2019 to present)

Ph.D. Economics

Fields: Industrial Organization, Econometrics

**Brigham Young University** (2019)

B.S. Economics, Mathematics (double major, *summa cum laude*)

## COMPUTER AND LANGUAGE SKILLS

**Computer:** Julia, R, Stata, Python, SAS

**Language:** English (Native), Spanish (proficient)

## WORKS IN PROGRESS

### **“Learning to Sell and the Value of Seller Experience”**

I present evidence that more experienced online auction sellers run their auctions differently from less experienced sellers, particularly by setting lower starting bids. To explain this, I estimate a model in which Bayesian sellers learn to set static-optimal reserve prices, and prior beliefs may differ from the true static-optimal price. I also develop a model in which the choice of starting bid affects bidder arrival, yielding a modification of the standard optimal pricing rule, and estimate how sellers learn to set optimal prices according to different theoretical benchmarks; I use this to quantify the value of information held by more experienced sellers.

### **“Hospital Productivity and Learning with COVID-19”**

Using medical records for US COVID-19 patients, I investigate determinants of hospital productivity and learning ability, including the extent to which hospitals learn from their own experience (learning by doing) and that of both within-system and nearby hospitals (learning spillovers). I also explore how hospitals assign specific medical treatments, their willingness to switch to other treatments, and the extent to which treatment-specific knowledge is transferable.

## WORKING PAPERS

**“Air Pollution and Mortality: Non-Attainment of PM<sub>2.5</sub> National Ambient Air Quality Standards”** (with C. Arden Pope III). *Under Review*.

## PUBLICATIONS

**“The Log-T, GB2, and Skewed Generalized Log-T Distributions with Financial Applications”** (with James B. McDonald). *Journal of Econometrics*. 2021.

**“Cancer Mortality Risk, Fine Particulate Air Pollution, and Smoking in a Large, Representative Cohort of U.S. Adults”** (with Nathan C. Coleman, Dalton D. Mann, Jacob S. Lefler, Ray M. Merrill, Richard T. Burnett, Majid Ezzati, Julian D. Marshall, Sun-Young Kim, Matthew Bechle, Allen L. Robinson, and C. Arden Pope III). *Cancer Causes and Control*. 2020.

**“Estimating Long-Term Pollution Exposure Effects Through Inverse Probability Weighting Methods with Cox Proportional Hazards Models”** (with Jacob S. Lefler, Richard T. Burnett, Majid Ezzati, Julian D. Marshall, Sun-Young Kim, Matthew Bechle, Allen L. Robinson, and C. Arden Pope III). *Environmental Epidemiology*. 2020.

**“Exploring the PM<sub>2.5</sub>-Mortality Relationship Within a Prospective Cohort with Multipollutant Models, Spatial Decompositions, and Time-Varying Exposures”** (with Jacob S. Lefler, Richard T. Burnett, Majid Ezzati, Nathan C. Coleman, Dalton D. Mann, Julian D. Marshall, Matthew Bechle, Allen L. Robinson, and C. Arden Pope III). *Environmental Health*. 2019.

**“Mortality Risk and Fine Particulate Air Pollution in a Large, Representative Cohort of U.S. Adults”** (with C. Arden Pope III, Jacob S. Lefler, Majid Ezzati, Julian D. Marshall, Sun-Young Kim, Matthew Bechle, Kurtis S. Gilliat, Spencer E. Vernon, Allen L. Robinson, and Richard T. Burnett). *Environmental Health Perspectives*. 2019.

**“The Asymmetric Log-Laplace: Another Branch on the Generalized Beta Distribution Tree”** (with Jonathan E. Jensen and James B. McDonald). *Statistics and Probability Letters*. 2019.

## TEACHING EXPERIENCE

Spring 2022	Advanced Industrial Organization III (PhD), University of Chicago, Teaching Assistant for Dennis Carlton
Winter 2022	Empirical Industrial Organization (MA), University of Chicago, Teaching Assistant for Christopher Dobronyi
Fall 2021	The Elements of Economic Analysis I (BA), University of Chicago, Teaching Assistant for Ivan Kwok
Fall 2017	Intermediate Price Theory II (BA), Brigham Young University, Teaching Assistant for John Stovall

### **RESEARCH EXPERIENCE AND OTHER EMPLOYMENT**

2018-2019	Brigham Young University, Research Assistant for James McDonald
2017-2019	Brigham Young University, Research Assistant for C. Arden Pope, III
2017	Brigham Young University, Research Assistant for Emily Leslie
2017	Compass Lexecon, Summer Analyst

### **HONORS AND SCHOLARSHIPS**

2020	Martin and Margaret Lee Prize (High Score on Econometrics Core Exam)
2019	Warren Rollins and Murdell Hull Fund Scholarship
2013-2019	National Merit Scholarship

### **REFEREEING**

Journal of Policy Analysis and Management