JOSHUA HIGBEE

joshuadhigbee@uchicago.edu - joshuadhigbee.github.io

Education

University of Chicago
Ph.D. in Economics

Brigham Young University
B.S. in Economics, B.S. in Mathematics (summa cum laude)

Professional Experience

Research Fellow J. Reuben Clark Law School, Brigham Young University	2022-2024
Summer Intern Benchmarking, Amazon Inc.	2022
Research Assistant Profs. Leslie, McDonald, and Pope, Brigham Young University	2017–2019
Summer Intern Compass Lexecon	2017

Working Papers

Learning and Information Design on an Auction Platform (Job Market Paper)

Abstract: Online platforms often do not directly control users' pricing strategy, and instead offer analytics and other information to help steer user behavior. I study how information provision by an auction platform to sellers shapes platform fees and outcomes using data from eBay auctions of children's toys. I present evidence that new sellers face uncertainty about how to set optimal reserve prices: they set lower reserve prices and earn higher revenues as they gain more experience. I develop a model where new sellers learn to set reserve prices on an auction platform with selective participation, and I show that sellers choose reserve prices to both extract surplus from bidders and attract additional bidders to their auction. I provide conditions under which new sellers' beliefs about the effect of reserve prices on bidder arrival are semiparametrically identified. Estimates from the learning model indicate that new sellers underestimate the effect of high reserve prices on deterring bidder entry, which leads to higher reserve prices and more items listed than for fully-informed sellers. Counterfactual simulations show that platform information provision can help new sellers learn the true bidder arrival process, which increases bidder entry as well as seller and platform profits. However, when jointly choosing information provision and platform fees, it may be optimal to not fully reveal information to sellers.

Fix the Price or Price the Fix? Resolving the Sequencing Puzzle in Corporate Acquisitions (with Matthew Jennejohn, Cree Jones, and Eric Talley)

Abstract: Significant corporate transactions (such as financing and acquisition agreements) are typically negotiated in stages, wherein core pricing terms are fixed early while most non-price provisions are relegated to subsequent bargaining. This ordering stands in stark (and curious) contrast with canonical theories of contract design, which overwhelmingly counsel that non-price terms should be fixed first, saving price negotiations for last so as to fine tune the parties' net payoffs. This longstanding disjunction between theory and practice has become a celebrated puzzle for transactional design. We present an analytic framework that helps to reconcile the two, marrying a bargaining model and a search game over innovative contractual provisions. Our framework delivers a robust and tractable set of intuitions about when fixing price before other terms optimally incentivizes strategic search investments by the

contracting parties. Our analysis is also amenable to making counterfactual comparisons of regimes where price is (and is not) set first, generating in the process several empirically testable implications.

Works in Progress

Identification in Models with Agent Learning

Abstract: Economic models often consider the agents making decisions under uncertainty; in many cases, these agents may mitigate that uncertainty by learning about their environment. Agents' decisions are jointly determined by their beliefs and other factors including unobserved heterogeneity and state dependence, which opens the question of whether beliefs can be identified. I present conditions under which agents' beliefs about a parametric model are nonparametrically identified in two common microeconomic settings: discrete choice and continuous choice. When agents choose among discrete options, such as consumer products, rich variation in the set of signals traces out agents' prior beliefs over time. When choices are continuous, as when firms choose prices or advertising spending, differences across agents reveal the beliefs that drive their decisions. These results imply tests of common assumptions in settings with agent learning.

Information Demand on Centralized Exchanges (with Marco Loseto)

Retailer Self-Preferencing When Consumers Learn by Searching (with Oguz Bayraktar)

Selected Publications

A Comparison of the GB2 and Skewed Generalized Log-T Distributions with an Application in Finance (with James B. McDonald), *Journal of Econometrics*, 2024

Abstract: Several families of statistical distributions have been used to model financial data. The four-parameter generalized beta of the second kind (GB2) and five-parameter skewed generalized t (SGT) have been fit to return and log-return data, respectively. We introduce the skewed generalized log-t (SGLT) distribution and note that the GB2 and SGLT share such distributions as the asymmetric log-Laplace (ALL), log-Laplace (LL), and log-normal (LN). We then compare the relative performance of the GB2 and SGLT in modeling the distribution of daily, weekly, and monthly stock return data. We find that the GB2 and SGLT perform similarly and that the three-parameter log-t (LT) distribution is quite robust.

The Asymmetric Log-Laplace Distribution as a Limiting Case of the Generalized Beta Distribution (with Jonathan E. Jensen and James B. McDonald), *Statistics and Probability Letters*, 2019

Abstract: The asymmetric log-Laplace (ALL) and the generalized beta distribution of the second kind (GB2) have been used in many applications. We demonstrate that the ALL is a limiting case of the GB2 and examine their ability to model stock returns.

Awards, Scholarships, and Grants

Rosen Memorial Fellowship Award	2024-2025
University of Chicago Social Sciences Division Fellowship	2019-2024
Martin and Margaret Lee Prize (High Score, Econometrics Core Exam)	2020
Warren Rollins and Murdell Hull Fund Scholarship	2019
National Merit Scholarship	2013-2019

Teaching Experience

Econometrics (undergraduate)	TA for Prof. Richert	Spring 2024
Advanced Industrial Organization II (graduate)	TA for Prof. Hortaçsu	Winter 2023
Competitive Strategy (MBA)	TA for Prof. Budish	Winter 2023
Advanced Industrial Organization III (graduate)	TA for Prof. Carlton	Spring 2022
Empirical Industrial Organization (masters)	TA for Prof. Dobronyi	Winter 2022
Elements of Economic Analysis I (undergraduate)	TA for Prof. Kwok	Fall 2021

Professional Service

Organizer of Industrial Organization Graduate Reading Group, University of Chicago 2023–2024

Conferences Winter Deals 2024, BYU Graduate Student Conference 2022

Presentations IO Lunch, Marketing Student Workshop, Implementation Matters

Refereeing Activity Journal of Policy Analysis and Management

Additional Information

Citizenship USA

Programming Skills Julia, R, Stata, SQL

Languages English (Native), Spanish (Proficient)