JOSHUA HIGBEE

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Education

University of Chicago, Ph.D. Economics *2019–present*

Brigham Young University, B.S. Economics, B.S. Mathematics (*summa cum laude*) *2013–2019*

References

Professor Ali Hortaçsu (Chair)
University of Chicago
Kenneth C. Griffin Department of Economics
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Professor Giovanni Compiani
University of Chicago
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Professor Dennis Carlton
University of Chicago
Booth School of Business
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Professor Günter Hitsch
University of Chicago
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Research and Teaching Fields

Primary: Industrial Organization, Quantitative Marketing

Secondary: Econometrics

Job Market Paper

Learning and Information Design on an Auction Platform

Abstract: *Online platforms often do not directly control users' pricing strategy, instead offering analytics and other information to help steer user behavior. I study the role of information provision by the platform in a market where new sellers may learn how to use the platform. In a dataset of eBay auctions for children's toys, I show that as new sellers gain more experience they set lower reserve prices, earn higher revenues, and attract more bidders. I develop a model of selective platform participation where new sellers learn to set reserve prices through repeated transactions. I provide conditions under which new sellers' beliefs about their influence on bidder arrival are semiparametrically identified. Empirically, I find that new sellers underestimate the bidder-deterrence effect of high prices; since sellers only partially learn the arrival process in their first auctions, many sellers then underestimate the profitability of listing future items. Counterfactual simulations indicate that platform and seller profits improve, and more bidders enter, when the platform can shift new sellers' beliefs toward the true parameters.*

Selected Publications

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

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: Another Branch on the Generalized Beta Distribution Tree (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.*

Work 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.*

Bargaining, Bartering, and Price Rigidity in Corporate Contracting (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.*

Information Demand on Centralized Exchanges (with Marco Loseto)

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

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*

Research Experience and Other Employment

Summer Intern, Amazon	*2022*
Research Assistant for Prof. McDonald, Brigham Young University	*2018–2019*
Research Assistant for Prof. Pope, Brigham Young University	*2017–2019*
Research Assistant for Prof. Leslie, Brigham Young University	*2017*
Summer Intern, Compass Lexecon	*2017*

Professional Experience

Organizer of Industrial Organization Graduate Reading Group, University of Chicago	*2023–2024*
Conferences	*Winter Deals 2024*, *BYU Graduate Student Conference 2022*
Refereeing Activity	*Journal of Policy Analysis and Management*

Additional Information

Citizenship	USA
Programming Skills	Julia, R, Python, SQL, Stata
Languages	English (Native), Spanish (Proficient)

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