

William Brasic

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Applied Microeconomics, Industrial Organization

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EDUCATION

The University of Arizona <i>Ph.D., Economics</i>	May 2027 (Expected) Tucson, AZ
University of Nevada – Las Vegas <i>M.S., Data Intelligence and Applied Economics</i>	May 2022 Las Vegas, NV
University of Nevada – Las Vegas <i>B.A., Economics (Magna Cum Laude)</i>	August 2020 Las Vegas, NV

RESEARCH PAPERS

Job Market Paper

Hooked on Flavor: Addiction, Present Bias, and the Consequences of E-Cigarette Flavor Policy

- Flavored e-cigarettes have captured millions of users who are disproportionately teens and young adults, while bans on them have triggered one of the most highly controversial regulatory debates in recent nicotine public health policy. To evaluate e-cigarette flavor policy, I develop and estimate a dynamic discrete choice model of cigarette and e-cigarette demand with forward-looking, present-biased consumers, featuring nicotine-driven addiction stocks, a flavored habit stock, and heterogeneous flavor preferences that vary with household age composition. Using NielsenIQ scanner data for 2021–2023, I first present reduced-form evidence documenting strong habit persistence, moderate cross-category substitution patterns, and heightened flavored e-cigarette demand among households with younger members. I then estimate the dynamic model via a two-stage pseudo-maximum-likelihood procedure and simulate counterfactual flavor policies under rational and time-inconsistent discounting. Three findings emerge. First, the feared cigarette substitution backfire does not materialize: the dominant response to a ban is market exit rather than switching to cigarettes, driven primarily by strong flavor preferences. Second, enforcement scope is salient: restricting the ban to only FDA-authorized brands captures only 84% of the addiction reduction, with the gap driven by substitution to unauthorized products. Third, a 0.50/mL excise tax achieves 92% of the ban’s addiction reduction at less than half the welfare cost. Present bias does not alter this policy ranking, but reduces the true welfare cost of both instruments by converting part of the measured loss into an internalized correction.

Working Papers

Algorithmic Pricing, Recommendation Systems, and Competition

Revise and Resubmit at The International Journal of Industrial Organization

Award: The University of Arizona Ed Zajac Prize for Best Third-Year Paper

- AI-powered pricing algorithms raise concerns about supracompetitive outcomes without explicit coordination. Meanwhile, digital platforms use recommendation systems (RSs) to influence product visibility. This paper models Bertrand-Markov price competition in a differentiated product market with heterogeneous consumers, where both sellers’ pricing and the platform’s recommendations are AI-driven. The findings show that RSs can autonomously inhibit algorithmic anticompetitive conduct, resulting in prices even below the Bertrand-Nash benchmark. The results hold when the platform only prioritizes profits, as well as with variations in consumer heterogeneity, market conditions, and underlying learning parameters.

Works in Progress

When Asymmetric Pricing Algorithms Collide

Award: The University of Arizona Steve Manos Prize for Best Second-Year Paper

- Algorithms are increasingly superseding humans in the pricing of goods and services, enabling firms to adapt to shifting market dynamics with greater precision. Despite the widespread adoption of these algorithms, there remains a scarcity of knowledge regarding their specific configurations and their impact on competition. I assess whether asymmetric reinforcement learning-based pricing algorithms can learn to engage in tacit collusion within a repeated Bertrand-Markov pricing environment. My analysis reveals that diverse algorithms can indeed learn to tacitly collude, consistently setting and sustaining prices above competitive levels. This practice results in enhanced firm profitability, while concurrently diminishing consumer welfare.

RESEARCH ASSISTANTSHIPS

Arizona Residential Utility Consumer Office

Spring 2026

Research Assistant

Tucson, AZ

- Supported expert witness testimony for [Professor Stanley Reynolds](#) by conducting data-driven impact assessments of proposed rate increases, projecting damages based on consumer demographics and income
- Gathered, aggregated, and cleaned 10+ gigabytes of retail electricity billing records and U.S. Census income data to analyze energy affordability for Arizona utility customers across ZIP codes and socio-economic groups

TEACHING

Sole Instructor of Record

[Introduction to Econometrics](#)

Fall 2024

- Solely instructed 20+ students on econometrics and machine learning, receiving a mean evaluation grade of 94%
- Guided students in using R for data science, econometrics, and machine learning using real-world examples and data

Head Graduate Teaching Assistant

Basic Economic Issues

2022 – 2025

- Led teams of 10+ undergraduate and graduate students as the head teaching assistant in this 500+ student course
- Wrote Python code to automate uploading participation and exam score data, reducing time spent by 93%

Graduate Teaching Assistant

Computational Methods and Dynamic Models (*Ph.D.*)

Spring 2025

Industrial and Antitrust Economics

Fall 2025

Public Sector Economics

Spring 2026

SKILLS

Programming Languages

R; MATLAB; C++; Julia; Python; SQL

Tools

Microsoft Office; Git/GitHub; Shell; Docker; Slurm; LaTeX

CONFERENCES, SEMINARS, AND WORKSHOPS

Southern Economic Association Annual Meeting

November 2026

Presenter

Houston, TX

The University of Arizona Econometrics Lunch

May 2026

Presenter

Tucson, AZ

NBER Digital Economics and AI Meeting

February 2025

Invitee

Stanford, CA

FELLOWSHIPS, GRANTS, AND SCHOLARSHIPS

Michael B. Bidwell Scholarship in Economics <i>\$1,965.00</i>	2025 <i>The University of Arizona</i>
Ed Zajac Prize for Best Third-Year Paper <i>\$1,500.00</i>	2025 <i>The University of Arizona</i>
Data Science Roots for Resilience Fellowship <i>\$7,000.00</i>	2024 <i>The University of Arizona</i>
Steve Manos Prize for Best Second-Year Paper <i>\$2,000.00</i>	2024 <i>The University of Arizona</i>
Joseph Smeeding Memorial Scholarship in Economics <i>\$1,549.00</i>	2023, 2024 <i>The University of Arizona</i>
George W. Coleman Scholarship in Economics <i>\$2,000.00</i>	2023, 2025 <i>The University of Arizona</i>
Graduate Access Fellowship <i>\$8,000.00</i>	2022 <i>The University of Arizona</i>

REFERENCES

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Professor Ashley Langer

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Professor Price Fishback

Placement Director
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