

Gretchen Sileo

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ACADEMIC POSITIONS

Temple University

Assistant Professor of Economics

Philadelphia, PA

2023–Present

EDUCATION

Georgetown University

Ph.D. Economics

M.A. Economics

Washington, DC

2017–2023

Rensselaer Polytechnic Institute

M.S. Applied Mathematics

B.S. Mathematics and Psychology, Minor in Economics

Troy, NY

2010–2014

WORKS IN PROGRESS

Proactive and Reactive Infrastructure Investment

Maintaining infrastructure requires investment. Faced with uncertain quality degradation, managers can either invest proactively to prevent failure or reactively to address problems. Using a new dataset on drinking water systems, I construct and estimate a dynamic discrete choice model of infrastructure investment. Simulation results indicate that investment is currently too low to prevent system quality decline. Proactive-promoting policies facilitate the prevention of most health-based violations but leave some systems vulnerable to extreme quality decline. By contrast, reactive-promoting policies lead to milder but pervasive violations. A policy that increases proactive investment and reserves a safety net of reactive support enables all managers to sustain functional infrastructure.

Technology and Market Power: The United States Cement Industry, 1974-2019

with Nathan Miller, Matthew Osborne, and Gloria Sheu

We examine the evolution of market power in the cement industry over more than four decades using a structural model of procurement. The model matches aggregated outcomes in the data, and implies transportation costs, shipping distances, and demand elasticities that are consistent with external sources. Evaluating county-level outcomes throughout the contiguous United States, we find that market concentration and markups increase but that prices do not rise. We attribute these patterns to a technological innovation—the precalciner kiln—that lowered variable costs, increased plant-level capacities and economies of scale, and contributed to an industry shakeout in which many plants closed.

Phoning Home: The Procurement of Telecommunications Services for Prison Systems in the United States

with Marleen Mara and Nathan Miller

When incarcerated individuals in the United States purchase goods and services, they do so from monopoly vendors selected by their correctional authority. We study the case of inmate calling services (ICS), where the Federal Communications Commission has recently characterized prices as “exorbitant” and where commission payments from the winning provider to the facility are common practice. We obtain and analyze data from public records requests that we submitted to all fifty states, and estimate the demand function based on sudden, drastic price reductions in two state prisons. We estimate providers’ latent costs using a novel first-score auction model with evaluation uncertainty and multi-dimensional bidder types. Counterfactual policy simulations show that regulating call rates reduces commissions while also increasing the market power of the winning provider.

Low-Carbon Investment and Climate Policy

with Sarah Armitage, Nathan Miller, and Matthew Osborne

TEACHING EXPERIENCE

Temple University

Instructor

Philadelphia, PA

2023-Present

- ECON-3536 – Economics of American Industry
- ECON-3503 – Introduction to Econometrics

Georgetown University

Teaching Assistant

Washington, DC

2018–2023

- ECON-433 – Public Sector Economics
- PECO-201 – Analytical Tools for Political Economics
- ECON-121 – Economic Statistics
- ECON-122 – Introduction to Econometrics

PROFESSIONAL EXPERIENCE

Georgetown University

Research Assistant to Professor Nathan Miller

Washington, DC

2019–2021

Research Assistant to Professor Dan Cao

2018

U.S. Department of Justice, Antitrust Division

Graduate Economics Intern

Washington, DC

2019

Framingham State University

Professional Mathematics Tutor

Framingham, MA

2017

Deloitte & Touche LLP

Senior Consultant, Business Risk

Boston, MA

2016

Consultant, Business Risk

2014–2016

HONORS AND AWARDS

Georgetown University 26th Razin Prize, Best Graduate Student Paper

2023

Georgetown University Summer Dissertation Fellowship

2020

Georgetown University Graduate School Fellowship

2017–2018

Deloitte Outstanding Performance Award

2015

Rensselaer Polytechnic Institute Summa Cum Laude

2014

Rensselaer Polytechnic Institute Founders Award for Excellence

2013

SEMINARS AND CONFERENCE PRESENTATIONS

2023 *Southern Economic Association; Women in Empirical Microeconomics Conference; Seminar in Water Economics onLLine; International Industrial Organization Conference; The Ohio State University; Temple University; University of Wisconsin-Madison; Baruch College, Zicklin School of Business; Arizona State University; U.S. Department of Justice; U.S. Department of Transportation — Office of the Inspector General; Federal Trade Commission; Center for Naval Analyses; Charles River Associates*

2022 *Southern Economic Association*

PROFESSIONAL SERVICE

Temple University

Economics Seminar Committee

2023–2024

Referee

Journal of Law and Economics, Water Resources and Economics