

# Gretchen Sileo

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## ACADEMIC POSITIONS

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<b>Temple University</b>	Philadelphia, PA
<i>Assistant Professor of Economics</i>	2023–Present

## EDUCATION

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<b>Georgetown University</b>	Washington, DC
<i>Ph.D. Economics</i>	2017–2023
<i>M.A. Economics</i>	
<b>Rensselaer Polytechnic Institute</b>	Troy, NY
<i>M.S. Applied Mathematics</i>	2010–2014
<i>B.S. Mathematics and Psychology, Minor in Economics</i>	

## WORKS IN PROGRESS

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### Proactive and Reactive Infrastructure Investment

*Maintaining infrastructure requires investment. Faced with uncertain quality degradation, managers choose to invest proactively to prevent failure or reactively to address problems. Using a new dataset on drinking water systems, I estimate a dynamic discrete choice model of infrastructure investment. Simulations indicate that tightening regulations without financial support increases failures and raises costs. Reactive projects enable timely intervention as systems approach noncompliance, reducing disparities stemming from income and size. Efficiently restoring compliance for all systems requires expanded proactive investment to maintain quality and an even greater increase in reactive funds to address unexpected failures.*

### Phoning Home: The Procurement of Telecommunications for Incarcerated Individuals in the United States

with Marleen Mara and Nathan Miller

*Incarcerated individuals in the U.S. purchase goods and services from monopoly vendors selected by their correctional authority. We study telecommunications services, which have come under bipartisan scrutiny due to the high prices inmates pay for phone calls. Prospective providers are evaluated on their technical capabilities, the prices they would charge, and the “commission” they would pay the correctional authority. Using data from public records requests, we estimate a first-score auction model with evaluation uncertainty and multi-dimensional bidder heterogeneity. Our results indicate that reducing the role of commissions in procurement lowers prices, whereas increasing competition among providers mainly raises commission payments. Moreover, recently promulgated federal regulation that bans commissions and caps prices likely preserves providers’ profitability.*

### 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.*

### The United States Paid Plasma Industry

with Peter Jaworski and Kaitlyn Wilson

### The Dynamics of Emissions Pricing and Technology Adoption

with Sarah Armitage, Nathan Miller, and Matthew Osborne

## PUBLICATIONS

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### New Frontiers in Research on Industrial Decarbonization

with K. Gillingham, L. Barrage, S. Armitage, D. Burtraw, J. Colmer, L. de Preux, J. Hawkins-Pierot, C. Holt, V. J. Karplus, A. Lofgren, R. Martin, N. Miller, M. Muuls, M. Osborne, E. Severnini, W. Shobe, V. Smirnyagin, T. Stoerk, A. Tsyyvinski, K. Wagner, and X. Wu. *Science*, 390(6771): 338-340 (2025).

## TEACHING EXPERIENCE

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### Temple University

Philadelphia, PA

2023–Present

*Instructor*

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

### Georgetown University

Washington, DC

*Teaching Assistant*

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

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### Georgetown University

Washington, DC

*Research Assistant*

2018–2021

### U.S. Department of Justice, Antitrust Division

Washington, DC

*Graduate Economics Intern*

2019

### Deloitte & Touche LLP

Boston, MA

*Senior Consultant, Business Risk*

2016

*Consultant, Business Risk*

2014–2016

## HONORS AND AWARDS

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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

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**2026** ASSA Annual Meeting (*discussant*)

**2025** NYU - Stern; International Industrial Organization Conference; University of Florida

**2023** Southern Economic Association; Women in Empirical Microeconomics Conference; Seminar in Water Economics onLine; 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

## ADVISING AND DISSERTATION COMMITTEES

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### Temple University

Luke Mafrica (*PhD committee*), Penn State Abington

2023

## PROFESSIONAL SERVICE

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### **Temple University**

*Economics Seminar Committee*

*2023-Present*

*Search Committee*

*2024-2025*

### **Referee**

*International Journal of Industrial Organization, Journal of Public Economics, Journal of Law and Economics,  
Water Resources and Economics*