# THOMAS HIERONS

hierons@uchicago.edu - trhierons.github.io - (773) 886-5039

Placement Directors:	Evan Rose	ekrose@uchicago.edu	(773) 834-3116
	Manasi Deshpande	mdeshpande@uchicago.edu	(773) 702-8260
Graduate Administrator:	Kathryn Falzareno	kfalzareno@uchicago.edu	(773) 702-3026

# OFFICE CONTACT INFORMATION

University of Chicago, Kenneth C. Griffin Department of Economics Saieh Hall for Economics 5757 S University Ave Chicago, IL 60637

#### EDUCATION

University of Chicago, Ph.D. Economics	2019–present
London School of Economics, M.Sc. Economics (with Distinction)	2016
London School of Economics, BSc. Econometrics and Mathematical Economics (with First Class Honors)	2015
Sciences Po., Paris, Erasmus Exchange Program	2012–2013

#### REFERENCES

Professor Esteban Rossi-Hansberg (Chair)	Professor Rodrigo Adão
University of Chicago	University of Chicago
Kenneth C. Griffin Department of Economics	Booth School of Business
earossih@uchicago.edu	rodrigo.adao@chicagobooth.edu
Professor Alexander Torgovitsky University of Chicago Kenneth C. Griffin Department of Economics torgovitsky@uchicago.edu	

## **RESEARCH AND TEACHING FIELDS**

Primary:Urban and Spatial Economics, International TradeSecondary:Econometrics

#### JOB MARKET PAPER

## Spreading the Jam: Optimal Congestion Pricing in General Equilibrium

Abstract: Road traffic leads to an externality: drivers do not account for the time cost they impose on others. In this paper, I study the potential gains from optimal congestion pricing. I develop an urban general equilibrium model which features residential and workplace location, travel mode, and route choices with congestion. The attractiveness of workplaces and residences is also determined endogenously. I provide conditions for the uniqueness of both the competitive equilibrium and the first best planner's problem and characterize the tax instruments needed to decentralize it. I show how the model can be solved with arbitrary taxes, including congestion toll zones of the kind often implemented in practice. I estimate the model's parameters in an application to New York City. I find that the first best tax policy would realize gains of \$0.77 per person per day or a total of \$21.7 million per week. Over a third of the gains from optimal congestion pricing at the individual link level can be achieved by a congestion zone that covers only lower Manhattan. I decompose these gains along different margins of adjustment, finding that mode choice is a key driver of the results with driver route choice and general equilibrium location choices also playing a non-negligible role.

## WORK IN PROGRESS

**Survival of the Fit Test: Can Experiments Validate Structural Models?** (with Omkar Katta and Alexander Torgovitsky)

## McFadden's Missing Models: Zeros in Discrete Choice

## **RESEARCH EXPERIENCE**

Pre-Doctoral Research Assistant, University of Oxford for Professor Anthony Venables 2017–2019

## AWARDS, SCHOLARSHIPS, AND GRANTS

Rosen Memorial Fellowship Award, University of Chicago	2024-2025
George S. Tolley Prize for Best Third Year Paper, University of Chicago	2022
Social Sciences Division Fellowship, University of Chicago	2019-2024

## TEACHING EXPERIENCE

Math Camp (graduate)	ТА	Fall 2023
Econometrics II- Honors (undergraduate)	TA for Prof. Torgovitsky	$Spring \ 2023$
Econometrics (undergraduate)	TA for Prof. Tabord-Meehan	Winter 2023
Applied Regression Analysis (MBA)	TA for Prof. Farrell	Fall 2022
Econometrics (undergraduate)	TA for Prof. Tabord-Meehan	$Spring \ 2022$
Econometrics II- Honors (undergraduate)	TA for Prof. Torgovitsky	Fall 2021

## ADDITIONAL INFORMATION

Citizenship	United Kingdom, France
Programming	Julia, Python, R, STATA, MATLAB
Languages	English (Native), French (Fluent), Turkish (Basic)