#### Office Contact Information

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Placement Directors: Professor Ufuk Akcigit, <u>uakcigit@uchicago.edu</u>, (773) 702-0433

Graduate Student Coordinator: Robert Herbst, <a href="mailto:fherbst@uchicago.edu">fherbst@uchicago.edu</a>, (773) 834-1972

#### Education

The University of Chicago, 2014 to present

Ph.D. Candidate in Economics

Thesis Title: "Advertising, Brand Preferences and Market Structure"

Expected Completion Date: June 2021

Rice University, 2010 to 2014

B.A., Magna Cum Laude

Mathematics, Statistics, Mathematical Economic Analysis

#### References:

Professor Greg Kaplan Professor Joseph Vavra

University of Chicago Univ. of Chicago Booth School of Business

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(773) 702-5079 (773) 834-0959

Professor Chad Syverson

Univ. of Chicago Booth School of Business

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### Research Fields:

Primary fields: Macroeconomics

Secondary fields: Industrial Organization, Firm Growth

## Teaching Experience:

### <u>Lecturer</u>

Spring, 2018 Elements of Economics Analysis III (Macroeconomics), University of Chicago

Spring, 2017 Elements of Economics Analysis III - Honors, University of Chicago

## Teaching Assistant

Winter, 2018 Behavioral Economics & Policy, University of Chicago

Winter, 2017	Elements of Economics Analysis III - Honors, University of Chicago
Fall, 2017	Introduction to Economic Analysis of Law, University of Chicago
Fall, 2017	Microeconomics, Univ. of Chicago Booth School of Business
Spring, 2016	Computational Methods in Economics, University of Chicago
Winter 2016	Intro to International Economics, University of Chicago

### Honors, Scholarships, and Fellowships:

2019	Becker Friedman Institute Data Acquisition Fund, University of Chicago
2019	Travel and Data Fund Awards, University of Chicago
2015	Sherwin Rosen Fellowship, University of Chicago
2014	Social Sciences Fellowship, University of Chicago

#### **Conferences and Seminar Presentations:**

2019 Trans-Atlantic Doctoral Conference, London School of Business

## **Research Papers:**

# "Advertising, Brand Preferences and Market Structure" (Job Market Paper)

This paper explores how innovations in advertising technology reshape consumers' brand preferences – propensity to purchase certain brands over others despite similar prices – and contribute to changes in the market structures of grocery products. I first document that the average market concentration and markup for consumer-packaged goods decreased by 10% and 5% between 2010 and 2016. Next, I show that the aggregate cost function of the advertising industry shifted significantly during the same period. To structurally estimate model parameters, I construct a multi-product, multi-sector heterogeneous firm model with endogenous advertising and entry/exit decisions. I find that advertisements have greater influence on consumers' brand preferences in categories where brands are less substitutable. On the macroeconomic level, my model suggests that changes in advertising cost structures are the main driving forces behind redistribution of firm market shares. The counterfactual analysis shows that if the advertising cost structures had not changed, the average markup and market concentration would have both increased between 2010 and 2016.

## "Constructing Location-Specific Price Indexes from Scanner Data"

As a recent trend in empirical macroeconomics literature, many researchers are now using location-specific price indexes as measures of cost of living in different localities, instead of aggregate measures such as the Consumer Price Index (CPI) released by national statistical agencies. Based on item level micro-data collected from around 35000 U.S. supermarkets from 2006 to 2016, I compare different approaches to construct such location-specific price indexes from scanner datasets, and propose a method that generates unbiased, free of "chain drift" indexes while staying computationally feasible. I show that the resulting indexes are consistent with official statistics released by the U.S. Bureau of Labor Statistics and discuss ways to treat missing data in the process. My results suggest that there is significant regional variation in inflation rates across U.S. locations from 2006 to 2016: cities have lower inflation rates than rural areas. This finding potentially raises new interesting questions on the effect of central banks' monetary policies on regional inflation rates.