# SOPHIA (SONIA) GILBUKH

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### **EDUCATION**

PhD, Economics

NYU Stern School of Business, New York, NY

May 2018

Bachelor of Science, Mathematics with Honors

Haverford College, Haverford, PA

May 2009

### ACADEMIC EMPLOYMENT

Assistant Professor, Department of Real Estate Baruch College, City University of New York Zicklin School of Business, New York NY August 2018 – present

### TEACHING EXPERIENCE

## Baruch College, Zicklin School of Business

RES 3400 Real Estate Capital Markets

 $Fall\ 2018,\ Spring\ 2019,\ Fall\ 2019,\ Fall\ 2020$ 

#### New York University, Stern School of Business

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PhD Math Camp, Instructor	Summer 2016
PhD Topics in IO (Theory), Teaching Assistant for Jidong Zhou	Fall 2014
Undergraduate Microeconomics, Teaching Assistant for Simon Bowmaker	Fall 2015
Undergraduate Advanced Topics in Modern Macro, Teaching Assistant for Laura Veldkamp	Spring 2014

## **Haverford College**

Statistics, Teaching Assistant for Weiwen Miao	Spring 2008
Linear Algebra, Teaching Assistant for Lynne Butler	Fall 2007

### RESEARCH

Research Interests: Real Estate, Industrial Organization

# **PUBLICATIONS**

"Rational buyers search when prices increase," with Luís Cabral, Journal of Economic Theory, Volume 187, 104998, 2020.

"Firm Dynamics and Pricing under Customer Capital Accumulation," with Pau Roldan, Journal of Monetary Economics, 2020.

"Deficits, Public Debt Dynamics and Tax and Spending Multipliers," with Gauti Eggertsson and Matthew Denes, Economic Journal, 123 (566), 133-163, 2013.

#### WORKING PAPERS

"Heterogeneous Real Estate Agents and the Housing Cycle," with Paul Goldsmith-Pinkham (JMP)

Abstract: The real estate market is highly intermediated, with 90% of buyers and sellers hiring an agent to help them transact a house. However, formal training to become an agent is short, and agents primarily learn on the job. Low entry barriers and fixed commission rates result in a market where inexperienced intermediaries have a large market share, especially during and after boom peri- ods. Using rich micro-level data on listings and deeds, we first show that agents' experience affects clients' outcomes and is particularly important in the busts. We then study the aggregate implications of the experience distribution on the efficiency of the real estate market by building a theoretical entry and exit model of real estate agents with aggregate shocks and considering several policies that raise the cost of entry and thus favorably alter the equilibrium distribution of experience. We find that low entry barriers amplify the cycles in the housing market.

"The Price to Rent Ratio: A Macroprudential Application" with Andrew Haughwout and Joe Tracy Abstract: We examine the potential for the price-to-rent ratio to be used as a macroprudential tool. Standardized appraisal methods, such as the comparable sales and replacement cost appraisal are not designed to identify speculative housing markets. In addition, appraisers could estimate the current market rent for a property. The resulting price-to-rent ratio would provide a useful signal for speculative pressures. We illustrate this by estimating price-to-rent ratios for home purchases using the American Housing Survey. We show that the distribution of price-to-rent ratios shifted up dramatically during the housing boom. We illustrate how the price-to-rent ratio could be incorporated into a lending policy so as to generate countercyclical loan-to-value ratios.

#### RESEARCH IN PROGRESS

"Competing When No-one Wants to Work With You: The Entry of RedFin in the Real Estate Market" with Paul Goldsmith-Pinkham

Abstract: The commission for real estate agents is remarkably high and stable, despite the low cost of entry into the labor market for agents. Explanations for this high rate have centered around the bilateral nature of the transaction in real estate markets, with agents representing the buyers and the sellers. A key feature of this arrangement is that buying and listing agents can exercise some discretion in what agents they choose to work with. This ability to "exclude" other agents from the market lends a natural setting for tacid collusion on commission, where agents might be reluctant to deviate from the standard rate in order to maintain good standing with other agents. This paper presents the first empirical test of whether agents attempt to tacitly collude to exclude competing agents who offer lower commissions. We exploit the entry of RedFin, a large discount real estate brokerage, whose transparent strategy was to charge their customers lower comission fees. Combined with a dataset covering 150 different regional listing datasets from 2008-2018, we document the entry of RedFin into a number of markets, and attempt to identify whether RedFin agents were shut out of transactions by non-RedFin agents.

"Urgency to Buy: Amplification of House Price Fluctuations"

Abstract: In the bust, home buyers take their time in choosing a house, unafraid that the property they liked will be snatched by another buyer while they search for other potential options. In the boom, the rivalry grows as the number of buyers increases relative to the inventory of available houses. This urgency-to-buy shifts the bargaining power from sellers to buyers across aggregate states and amplifies the magnitude of the house price cycle. To quantify this channel, I build a dynamic search model where buyers are able to recall their past searches, unless the previously viewed houses are purchased by another rival buyer. I examine two counterfactuals to assess the contribution of this channel to the magnitude of the business cycle. First, I consider a model of naive buyers who make search and purchase decisions as if they can always recall previously viewed properties. Second, I estimate the model with no recall.

"Estimating search cost from price distributions of heterogeneous goods"

Abstract: I extend the Hong and Shum (2006) framework for estimating search costs using only the price distribution. Instead of a single search good, I allow for multiple substitute goods of varying quality. While an additional step of demand estimation is needed to tease out quality, this allows for richer settings where firms are competing within all substitutable goods, rather than identical products only.

### INVITED SEMINARS AND PRESENTATIONS

SITE(2020, online), WFA (2020, online), Cornell 2020 Annual Real Estate Symposium (2020, canceled), Fordham University (2020, rescheduled), University of Toronto (2019), SED (2019), AREUEA International Conference (2019), WFA (2019), 10th Consumer Search and Switching Costs Workshop (2019, Discussant), Hong Kong University (2019), NYC Real Estate Conference (2019), AREUEA (Discussant, 2018), DC RE Valuation Symposium (2018), Greater Boston Real Estate and Urban Economics Seminar (GBRUES, 2018), Haverford College (2018), Canadian Economics Association (2018), SFS Cavalcade (2018, Discussant), 16th Annual International Industrial Organization Conference (2018), Bank of Canada (2018), Baruch College (2018), Federal Reserve Board (2018), London School of Economics (2018), Harvard (2018), Colorado Finance Summit JMP Session (2017), Luxembourg School of Finance (2017), Center for Real Estate Finance Research at NYU Stern (2017), Federal Reserve Bank of New York (2017), Fall 2016 NET Institute Conference (2016, Discussant), ASSA (2016), Fall 2015 NET Institute Conference (2015, Discussant), 6th Workshop on Consumer Search and Switching Costs (2015, Discussant), 13th Annual International Industrial Organization Conference (2015)

#### HONORS AND AWARDS

Zicklin School of Business Teaching Excellence Award	2020
AREUEA Homer Hoyt Doctoral Dissertation Award (Third Prize)	2019
C.S.W.E.P. Summer Dissertation Fellow at the Federal Reserve Bank of New York	2017
CGEB PhD grant (\$1000), NYU Stern	2017

### **MEDIA**

Did Tax Reform Raise the Cost of Owning a Home?(NY Fed, Libery Street Economics Blog)

Quantities and Prices during the Housing Bust (NY Fed, Libery Street Economics Blog)

Can blockchain and electronic closings make home buying faster and more secure? (Boston Globe)

2018

# REFEREED JOURNALS

JET, Real Estate Economics, RESTAT, Review of Economic Dynamics, Journal of Housing Economics, Economica, Management Science, The Scandinavian Journal of Economics, The Review of Financial Studies

### **OTHER**

Languages: Russian (native), Latvian (native), English (fluent), French (fluent), Spanish (basic)

Work Authorization: US Citizen

 $Last\ updated\ September\ 18,\ 2020$