

Wen Wang

Department of Economics, Duke University,
Social Science Building, Suite 308C, Durham, NC 27708

✉ wen.wang1@duke.edu ☎ +1 (267)-239-6011 🌐 <https://sites.duke.edu/wenwang/>

Education

Duke University

Ph.D, Economics

○ Advisor: Christopher Timmins, Committee: Patrick Bayer, James W. Roberts, Steven Sexton

Durham, NC

2020 (Expected)

Renmin University of China

M.S, Economics

○ Advisor: Xiangbo Liu

Beijing, China

2014

Shandong University

B.A, Economics and Quantitative Finance

Jinan, China

2011

Research Interests

- Environmental Economics
- Urban Economics
- Public Economics

Publication

1. "The Impact of Internet Sales Tax in a Search Model of Money: Some Analytical Results," with Tiantian Dai, Shenyi Jiang, Xiangbo Liu, *Annals of Economics and Finance, Society for AEF, Vol 17, Issue 1, 133-144.*

Working Paper

"Environmental Gentrification" (Job Market Paper) The goal of environmental policy is to protect the environment while promoting efficiency and pursuing equity in the distribution of benefits and costs. This paper focuses on measuring the differential welfare impacts of environmental improvements across household groups, taking account of property market responses and housing re-optimization. A dynamic model of housing decisions with endogenous tenure status (renting vs. owning) and forward-looking residents (heterogeneous by their wealth, income, and race) is used to extend the distributional analysis in three previously overlooked dimensions: wealth accumulation and expectations corresponding to property market changes; differential impacts of property market appreciation on renters and owners; and preference heterogeneity over public amenities. The model is estimated taking advantage of an exogenous and unexpected environmental shock and employing a unique data set (L.A.FANS Data) tracking residents' locations and tenure choices in Los Angeles County from 2000 to 2007. I estimate households' heterogeneous preferences, explore distribution of welfare changes, and investigate welfare redistribution caused by market responses using my estimations in counterfactual analysis. The

results show that the distribution of benefits from a positive environmental shock favors high-income households, especially owners, and harms low-income renters. Low-income renters who gain a small welfare gain from environmental changes in partial equilibrium experience welfare losses once I incorporate housing market responses and residential sorting in a general equilibrium measure. In contrast, owners of all incomes benefit more in general equilibrium because of the capitalization of environmental improvements in the housing market. Evidence that the benefits of an environmental improvement are distributed regressively and the fact that renters are on average both poorer than owners and are more likely to be people of color also raises environmental justice concerns, which will affect likely policy design and evaluation in the future.

“The Link between Gentrification and Displacement and the Effects of Displacement on Residents in Los Angeles County” (with Christopher Timmins and Ashley Qiang) Over the past several decades,

cities across the U.S. have experienced gentrification and the associated socio-demographic shifts. As this phenomenon has accelerated, concerns about gentrification-induced displacement and its impacts on incumbent residents have grown. This paper studies the link between gentrification and displacement, identifying the social groups most likely to be displaced and the impacts on those displaced groups. The results provide evidence of displacement, showing that lower-income renters are significantly more likely to exit from gentrifying neighborhoods. Moreover, they tend to move to neighborhoods with significantly lower school quality and higher crime rates. Owners, however, are more likely to stay in gentrifying neighborhoods, benefitting from the increased amenities and rising home values. When these owners do move, they convert those capital gains into improved living conditions in stark contrast to renters. These results provide direct evidence of how housing tenure defines the welfare consequences of an environmental improvement.

“Do Evictions Cause Income Changes? An Instrumental Variables Approach” (with Grace Mok)

Evictions are an important aspect of the affordable housing crisis facing low-income renters, but there has been little research quantifying their causal impacts. This poses challenges for academics interested in understanding inequality and policy-makers interested in reducing it. Merging two datasets that are new to the literature, I address this gap in the causal literature by using an instrumental variables strategy to examine the impact of evictions on household income over time in Durham, North Carolina. Exploiting gentrification-related evictions as an instrument, I find a 2.5% decrease in household income after eviction.

Work in Progress

“Impacts of Transportation Infrastructure on Labor Market and Residential Mobility: the effects of new metro lines in Los Angeles”, joint with Qi Pan

“Data+: Compare InfoUSA Data, Census Data (NHGIS Data), CoreLogic Data (Zillow Data), and HMDA Data”, joint with Christopher Timmins

Teaching and Research Experience

Duke University <i>Research Assistant</i>	Christopher Timmins 2017-2019
Duke University <i>Environmental Economics, Teaching Assistant</i>	Christopher Timmins 2016
Duke University <i>Environmental Justice, Teaching Assistant</i>	Christopher Timmins 2015
Cornell University <i>Environmental Economics (Summer Course), Teaching Assistant</i>	Shanjun Li 2013
Renmin University of China <i>Macroeconomics II, Teaching Assistant</i>	Xiangbo liu, Tiantian Dai 2013

Honors and Awards

- Duke Support for Interdisciplinary Graduate Networks (D-SIGN) grant, Duke University, 2019
- Graduate School Scholarship, Duke University, 2016-2018
- Environmental Economics Doctoral Scholars (DEEDS) Fellowship, Duke University, 2015-2016
- Summer Research Fellowship, Duke University, 2015-2017
- Graduate First-year Fellowship, Duke University, 2014
- Outstanding Graduate Students, Renmin University of China, 2013
- Renmin University of China Graduate Students First-Class Scholarship, 2011-2013

Conference Presentations and Workshops

21st Annual CU Environmental and Resource Economics Workshop <i>Presentation: "Gentrification and Residential Sorting"</i>	Vail, CO 2019
13th Meeting of Urban Economic Association <i>Presenter & Discussant in Student Prize Session</i>	New York, NY 2018
CAMP Resources XXV <i>Presentation: "Gentrification and Residential Sorting"</i>	Wilmington, NC 2018
Southern Economic Association Conference <i>Presentation: "A Dynamic Model of Demand for Houses with Tenure Choices"</i>	Washington, DC 2016
Workshop of Los Angeles Family and Neighborhood Survey (L.A.FANS) Data <i>University of Michigan</i>	Ann Arbor, MI 2015

Language and Computer Skills

- Chinese (Mandarin: native); English (fluent)
- Proficient in Matlab, Stata, R, ArcGIS and Python

References

- Christopher Timmins (Advisor)
Professor of Economics
Department of Economics, Duke University

209 Social Sciences Bldg, Box 90097
Duke University, Durham, NC 27708-0097
E-mail: christopher.timmins@duke.edu
Office: +1 (919) 660-1809

- Patrick Bayer (Committee member)
Gilhuly Family Professor in Economics
Department of Economics, Duke University
228D Social Sciences, Box 90097
Duke University, Durham, NC 27708
E-mail: patrick.bayer@duke.edu
Office: +1 (919) 660-1800

- James W. Roberts (Committee member)
Fred W. Shaffer Professor
Department of Economics, Duke University
228B Social Sciences, Box 90097
Duke University, Durham, NC 27708-0097
E-mail: j.roberts@duke.edu
Office: +1 (919) 660-1800

- Steven E. Sexton (Committee member)
Assistant Professor of Public Policy
Sanford School of Public Policy, Duke University
201 Science Drive, Rm 252, Box 90312
Duke University, Durham, NC 27708-0097
E-mail: steven.sexton@duke.edu
Office: +1 (919) 613-9348

- Federico Bugni (Committee member)
Associate Professor of Economics
Department of Economics, Duke University
213 Social Sciences, Box 90097
Duke University, Durham, NC 27708-0097
E-mail: federico.bugni@duke.edu
Office: +1 (919) 660-1887