

# Ruoyu Chen

George Washington University  
Department of Economics  
Monroe Hall  
2115 G St. NW, Room 340  
Washington, DC 20052, USA

Phone: +1 (202)-494-4116  
Fax: +1 (202)-994-6147  
Email: ruoyuchen@gwu.edu  
Homepage: <https://stevenrychen.com/>

## Education

Ph.D. Economics, George Washington University, expected May 2022.

Dissertation: *"Essays on Carbon Emission Trading, Renewable Energy and Housing Regulation"*

Committee: Prof. Arun Malik (Chair), Prof. Nicholas Vonortas, Dr. Jevgenijs Steinbuks

M.A. Economics, George Washington University, May 2018.

M.A. International Trade and Investment Policy, George Washington University, May 2015.

B.A. English Literature & Linguistics/ Economics, Tsinghua University, 2009.

## Fields of Specialization

Primary: Environmental and Energy Economics

Secondary: Urban Economics, Development Economics

## Research

### *Job Market Paper*

"Evaluating Power Sector Emissions under Regional Carbon ETS Pilots in China: A View from Space"

*Abstract:* To gain institutional and technical know-how for establishing a national carbon market, China has experimented with eight regional emission trading system (ETS) pilots programs since 2013. The prominence of this policy experiment and the unusual tradable performance standards design generated wide interest in evaluating their performance. However, co-existing new environmental regulations overlap with the ETS pilots, making obtaining an unbiased estimation of their effects challenging. To tackle this challenge, this study focused on evaluating the effects of the ETS pilots on SO<sub>2</sub> emissions of the thermal power generation sector, utilizing NASA Aura/OMI satellite data. By employing staggered and dynamic difference in differences models and carefully controlling for the effects of major air pollution and power sector regulations, this study provides a timely ex post evaluation of the ETS pilots. Results suggest that although SO<sub>2</sub> emissions of all power plants declined steadily over the 2010-2019 period, SO<sub>2</sub> emissions of treated facilities increased by about 5% relative to those of untreated facilities as a result of their participation in the ETS pilots. Results also show that the relative increase in SO<sub>2</sub> emissions of treated facilities continues to grow over time.

### *Other Research Papers*

"Measuring and Understanding the Value of Rent Stabilization and Its Implications for Racial Inequality: New Evidence from New York City", Working Paper, with Hanchen Jiang and Luis E. Quintero

"Estimating the Learning Curve of the Chinese Onshore Wind Energy Sector (2012-2015)", Working Paper

"Two Decades of Energy Efficiency Progress in Latin America", Work in Progress, with Jevgenijs Steinbuds

## Teaching Experience

*Teaching Assistant*, Principle of Microeconomics, George Washington University, Fall 2016, 2017, 2018, 2019, 2020 (Avg. Evaluation 4.76/5)

*Teaching Assistant*, Principle of Macroeconomics, George Washington University, Spring 2018, 2020 (Avg. Evaluation 4.83/5)

*Teaching Assistant*, Survey of International Economics, George Washington University, Spring 2017, 2019, 2021 (Avg. Evaluation 4.68/5)

*Teaching Assistant*, Review of Principles of Economics, Elliott School of International Affairs, George Washington University, Summer 2018, 2019

*Teaching Assistant*, Review of Intermediate Microeconomics and Macroeconomics, Elliott School of International Affairs, George Washington University, Summer 2018, 2019

## Research and Relevant Work Experience

*Consultant*, World Bank, Energy and Extractives Global Practice, Summer 2021

*Research Assistant*, Professor Rahul Simha, the "Grand Narrative" project, Summer 2020

*Co-organizer*, Development Tea Seminar Series, Institute of International Economic Policy, Elliott School of International Affairs, George Washington University, 2019-2021

*Organizer*, George Washington University Student Research Conference in Economics, 2018 & 2019

*President*, Student Association of Graduate Economists, 2018-2020

*Program Assistant*, International Trade and Investment Policy, Institute of International Economic Policy, Elliott School of International Affairs, George Washington University, 2014-2016

*Consultant*, Chinastudies Public Policy & Management Consulting Co. (Beijing, China), 2009-2013

## Grants and Awards

Sar and Brita Levitan Endowment Scholarship, George Washington University, 2020-2021

Graduate Fellowship, George Washington University, 2016-2020

ESIA Graduate Merit Fellowship, George Washington University, 2013-2015

China Construction Bank Scholarship, 2006-2007

## Presentations (including scheduled)

2021: 114th National Tax Association Annual Conference, 91th Southern Economic Association Annual Meeting

## Skills

**Programming:** Python, Stata, GIS,  $\LaTeX$ , Microsoft Office

**Languages:** English (proficient), Chinese (native)

## References

Prof. Arun Malik, George Washington University, [amalik@gwu.edu](mailto:amalik@gwu.edu)

Prof. Nicholas Vonortas, George Washington University, [vonortas@gwu.edu](mailto:vonortas@gwu.edu)

Dr. Jevgenijs Steinbuks, World Bank, [jsteinbuks@worldbank.org](mailto:jsteinbuks@worldbank.org)

Prof. Steven Suranovic, George Washington University, [smsuran@gwu.edu](mailto:smsuran@gwu.edu)

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