

Ruoyu Chen

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

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

Education

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

Dissertation: *"Essays on Environmental and Housing Regulations"*

Main advisor: Prof. Arun Malik

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

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

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

Research and Teaching Interests

Primary: Environmental and Energy Economics

Secondary: Urban Economics, Development Economics, Applied Microeconomics

Other teaching interests: Econometrics, Microeconomics, Macroeconomics, International Economics

Research

Job Market Paper

"Evaluating Power Sector Emissions under Regional Carbon ETS Pilots in China: A View from Space"
(latest version [here](#))

Abstract: Tradable performance standard (TPS) is an important policy instrument for mitigating CO₂ emissions in developing countries, who play an essential role in achieving drastic global carbon emissions reduction. However, whether a TPS system effectively reduces firm-level emissions in a developing country context remains unknown. This paper takes the first step in answering this question based on a policy experiment in China. Since 2013, China has introduced carbon emissions trading systems based on TPS in eight regions (ETS pilots). This study provides the first ex-post evaluation of these ETS pilots' effects on emissions from coal-fired thermal power generation facilities using staggered and dynamic difference-in-differences models. This study uses a novel data from NASA's Aura satellite to measure SO₂ emissions at the facility level. Contrary to common belief, results show that although SO₂ emissions of all facilities declined steadily from 2010 to 2019, SO₂ emissions of facilities covered by the ETS pilots (ETS facilities) increased by about 5-7% relative to those of non-ETS facilities. Moreover, the relative increase in SO₂ emissions of ETS facilities grew over time. A model is developed to show that the implicit output subsidy from the TPS design could increase the output of cleaner facilities, leading to more SO₂ emissions.

Working Papers

"Measuring and Understanding the Value of Rent Stabilization and Its Implications for Racial Inequality: New Evidence from New York City" (preparing for submission), with Hanchen Jiang (University

of North Texas) and Luis E. Quintero (JHU, Carey Business School)

"Estimating the Learning Curve of the Chinese Onshore Wind Energy Sector"

Work in Progress

"Decomposing Energy Efficiency Progress in the Caribbeans and Latin America: The Role of Government Policies", with Jevgenijs Steinbuks (World Bank)

Teaching Experience

Teaching Assistant (Undergraduate)

Principles of Microeconomics, George Washington University, Fall 2016-2020 (Evaluation 4.76/5)

Principles of Macroeconomics, George Washington University, Spring 2018, 2020 (Evaluation 4.83/5)

Survey of International Economics, George Washington University, Spring 2017, 2019, 2021 (Evaluation 4.68/5)

Teaching Assistant (Graduate)

Review of Principles of Microeconomics and Macroeconomics, Elliott School of International Affairs, George Washington University, Summer 2018, 2019

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

Professor Robert M. Dunn, Jr. Memorial Scholarship, George Washington University, 2021-2022

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)

114th National Tax Association Annual Conference, November 2021

91th Southern Economic Association Annual Meeting, November 2021

Skills

Programming: Stata, GIS, Python, L^AT_EX, Microsoft Office

Languages: English (proficient), Chinese (native)

References

Prof. Arun Malik (Main)

Professor of Economics
Department of Economics
George Washington University
Phone:
Email: amalik@gwu.edu

Dr. Jevgenijs Steinbuks

Senior Economist
Sustainability and Infrastructure
World Bank Development Research Group
Phone: +1 (410) 516-8237
Email: jsteinbuks@worldbank.org

Prof. Luis E. Quintero

Assistant Professor of Real Estate
Carey School of Business
Johns Hopkins University
Phone:
Email: leq@jhu.edu

Prof. Steven M. Suranovic (teaching reference)

Associate Professor of Economics & International Affairs
Department of Economics
George Washington University
Phone: +1 (202) 650-6021
Email: smsuran@gwu.edu

Last updated: November 2021