David D. Shin

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213 Social Sciences Box 90097, Durham, NC 27708

EDUCATION

Duke University — Durham, NC
PhD in Economics — *August 2019 - May 2025 (Expected)*

Duke University — Durham, NC
Master of Arts in Economics — *December 2022*

University of Michigan — Ann Arbor, MI
Bachelor of Science in Economics, Minor in Mathematics (with High Distinction) — *August 2014 - April 2017*

RESEARCH INTERESTS

International Economics, Environmental Economics, Macroeconomics

JOB MARKET PAPER

Climate Policies under Dynamic Factor Adjustment

Abstract: This paper develops and estimates a dynamic general equilibrium model of the global economy to investigate how imperfect and gradual adjustments of capital and labor across sectors affect the effectiveness of climate policies in reducing global emissions. The model's estimates indicate that (i) both capital assets and workers exhibit low responsiveness to changes in climate policies, limiting the policies' ability to permanently and swiftly shift capital and labor out of the fossil fuel sector; (ii) capital allocation across sectors exhibits strong persistence over time; and (iii) labor reallocation in response to changes in climate policies is slow, taking 8 years to reach 99 percent completion. I demonstrate that China's subsidy on non-fossil fuel energy sources boosts domestic consumption and investment but may inadvertently increase global emissions due to rising aggregate investment and output. Imperfect factor mobility amplifies this effect by limiting the reallocation of capital and labor away from the fossil fuel sector. My findings underscore the need to (i) combine a subsidy on non-fossil fuel energy sources with a carbon tax and (ii) improve capital and labor mobility to both reduce global emissions and enhance aggregate consumption.

WORKING PAPERS

Understanding Trade Imbalances

Abstract: Are persistent trade imbalances signs of distortions? This paper develops a unified framework to examine the drivers of persistent trade imbalances in eight advanced and emerging economies from 2000 to 2014. The results show that economy-specific intertemporal distortions, especially in the United States, are the primary contributor to global imbalances. Additionally, I find that without China's accession to the WTO, the U.S. would have maintained persistent trade surpluses, while China would have faced persistent deficits.

WORKS IN PROGRESS

Commodities Trade Fragmentation and Market Power
with Chiara Maggi and Alexandre Balduino Sollaci

Abstract: This paper introduces a novel framework with variable markups to assess the potential welfare losses from trade fragmentation in the global commodities market. The framework identifies five key welfare costs: (i) reduced foreign demand, (ii) higher imported input costs, (iii) productivity losses from decreased competition, (iv) a reduction in upstream suppliers, and (v) increased market power of regional suppliers. Our findings show that the rising market power of regional suppliers significantly amplifies the welfare costs of commodity trade fragmentation.

Research and Work Experience

PhD Graduate Assistant — August 2021 - Present
Duke University — *Durham, NC*
- Research Assistant to Professor Rafael Dix-Carneiro

Dissertation Fellow — August 2024
Federal Reserve Bank of St. Louis — *St. Louis, MO*
- Dissertation Research

Ph.D. Summer Intern — June 2024 - August 2024
Federal Reserve Bank of New York — *New York, NY*
- Dissertation Research

Fund Internship Program (FIP) — June 2023 - September 2023
International Monetary Fund (IMF) — *Washington, DC*
- PhD intern at the Research Department (World Economic Studies Division)

Short-Term Temporary (STT) — September 2021 - November 2021
World Bank — *Durham, NC*
- Analyzed the impact of trade facilitation policies on consumer prices in Brazil

Military Interpreter/Teaching Assistant — July 2017 - March 2019
Republic of Korea Army (ROKA) — *Republic of Korea*
- Compulsory Military Service

Undergraduate Research Assistant — October 2014 - April 2017
University of Michigan — *Ann Arbor, MI*
- Research Assistant to Professor James R. Hines Jr.

Teaching Experience

Macroeconomic Analysis II (PhD) — Spring 2021
Duke University — *Durham, NC*
- Teaching Assistant to Professor Andrea Lanteri and Professor Francesco Bianchi

Macroeconomic Analysis I (PhD) — Fall 2020
Duke University — *Durham, NC*
- Teaching Assistant to Professor Craig Burnside and Professor Cosmin Ilut

Seminar and Conference Presentations

2024
Duke University; Mid-Atlantic International Trade Workshop (Federal Reserve Board); Federal Reserve Bank of New York; Federal Reserve Bank of St. Louis; Economics Graduate Student Conference (WUSTL)

2023
Duke University; Federal Reserve Bank of Richmond; International Monetary Fund; Economics Graduate Student Conference (WUSTL); Midwest International Trade & Theory Conference (Georgia Tech)

Honors, Scholarships, and Fellowships

Graduate School Tuition Scholarship — *2019 - Present*
Duke University

Summer Research Fellowship — *2020, 2021, 2022*
Duke University

Phi Beta Kappa — *April 2017*
University of Michigan

James B. Angell Scholar — *April 2016*
University of Michigan

William J. Branstrom Freshman Prize — *April 2015*
University of Michigan

Personal Information

Citizenships: Republic of Korea, USA
Programming Skills: Stata, MATLAB, Dynare
Languages: Korean (Native), English (Fluent)

References

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