

David D. Shin

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EDUCATION

Duke University

PhD in Economics

May 2025 (Expected)

Durham, NC

Duke University

Master of Arts in Economics

December 2022

Durham, NC

University of Michigan

Bachelor of Science in Economics, Minor in Mathematics (with High Distinction)

April 2017

Ann Arbor, MI

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 <i>Duke University</i> <ul style="list-style-type: none">• Research Assistant to Professor Rafael Dix-Carneiro	August 2021 - Present <i>Durham, NC</i>
Dissertation Fellow <i>Federal Reserve Bank of St. Louis</i> <ul style="list-style-type: none">• Dissertation Research	August 2024 <i>St. Louis, MO</i>
Ph.D. Summer Intern <i>Federal Reserve Bank of New York</i> <ul style="list-style-type: none">• Dissertation Research	June 2024 - August 2024 <i>New York, NY</i>
Fund Internship Program (FIP) <i>International Monetary Fund (IMF)</i> <ul style="list-style-type: none">• PhD intern at the Research Department (World Economic Studies Division)	June 2023 - September 2023 <i>Washington, DC</i>
Short-Term Temporary (STT) <i>World Bank</i> <ul style="list-style-type: none">• Analyzed the impact of trade facilitation policies on consumer prices in Brazil	September 2021 - November 2021 <i>Durham, NC</i>
Military Interpreter/Teaching Assistant <i>Republic of Korea Army (ROKA)</i> <ul style="list-style-type: none">• Compulsory Military Service	July 2017 - March 2019 <i>Republic of Korea</i>
Undergraduate Research Assistant <i>University of Michigan</i> <ul style="list-style-type: none">• Research Assistant to Professor James R. Hines Jr.	October 2014 - April 2017 <i>Ann Arbor, MI</i>

TEACHING EXPERIENCE

Certificate in College Teaching (CCT) <i>Duke University</i> <ul style="list-style-type: none">• Multi-year, university-level program focused on systematic pedagogical training in college teaching	Spring 2025 (Expected) <i>Durham, NC</i>
Macroeconomic Analysis II (PhD) <i>Duke University</i> <ul style="list-style-type: none">• Teaching Assistant to Professor Andrea Lanteri and Professor Francesco Bianchi	Spring 2021 <i>Durham, NC</i>
Macroeconomic Analysis I (PhD) <i>Duke University</i> <ul style="list-style-type: none">• Teaching Assistant to Professor Craig Burnside and Professor Cosmin Ilut	Fall 2020 <i>Durham, NC</i>

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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