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# **Elliot Kang**

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## **EDUCATION**

Ph.D. in Economics, University of Michigan	Expected 2025
M.A. in Economics, Seoul National University, South Korea	2019
B.A. in Economics (summa cum laude), Seoul National University, South Korea	2017

## **FIELDS**

International Trade, Spatial Economics, Environmental Economics

## **WORKING PAPERS**

"Global Fisheries: Quantifying the Externalities from Open Access" (Job Market Paper)

#### WORK IN PROGRESS

## PRE-DOCTORAL PUBLICATIONS

"Generation Uphill: Housing Cost, Migration, and Commuting Time of the Young in South Korea" (with Chulhee Lee), *Seoul Journal of Economics*, Vol. 35, No.1, Feb 2022, 1-31.

"Is there Regional Inequality in Medical Accessibility of the Severely Injured? Application of Driving Time Data in South Korea" (with Hyunjoo Yang, Min Gyeong Kim, and Kanghyock Koh), *Journal of Market Economy*, Vol. 49, No.1, Feb 2020, 1-29.

## RESEARCH ASSISTANT EXPRIENCE

RA to Andrei Levchenko, University of Michigan	2022 - 2024
RA to Sebastian Sotelo, University of Michigan	2021 - 2022
RA to Jee-Hyeong Park, Seoul National University	2018
RA to Hyunjoo Yang, Seoul National University	2017 - 2018

<sup>&</sup>quot;Deforestation: A Global and Dynamic Perspective" (with Farid Farrokhi, Heitor Pellegrina, and Sebastian Sotelo) [Coverage: TradeTalks]

<sup>&</sup>quot;Playing with Blocs: Quantifying Decoupling" (with Barthélémy Bonadio, Zhen Huo, Andrei Levchenko, Nitya Pandalai-Nayar, Hiroshi Toma, and Petia Topalova)

<sup>&</sup>quot;Aggregate Productivity and Spatial Sorting"

<sup>&</sup>quot;Did High Speed Trains Promote Local Economic Activities?: Evidence from the Korea Train Express" (with Hyunjoo Yang and Kanghyock Koh)

## **TEACHING EXPERIENCE**

Graduate Student Instructor, University of Michigan	
Intermediate Intro to Statistics and Econometrics I	2021
Principles of Economics I	2020, 2021
Teaching Assistant, Seoul National University	
Undergraduate International Trade	2019
Undergraduate International Economics	2018

# **HONORS AND GRANTS**

Economics Fellowship, University of Michigan	2024
STEG Small Research Grants (co-PI with Farid Farrokhi, Heitor Pellegrina, and	2022
Sebastian Sotelo)	
Summer Research Fellowship, University of Michigan	2020, 2021
Predoctoral Fellowship, University of Michigan	2019
Lecture and Research Scholarship, Seoul National University	2018
Gwanak Residence Halls Scholarship, Seoul National University	2017
Chojun Fellowship, Seoul National University	2015 - 2016
Merit-based Scholarship, Seoul National University	2015

# **PRESENTATIONS**

Urban and Environmental Economics Visiting Lecture, Yale University	2024
International Economics Seminar, University of Michigan	2024
International Reading Group, University of Michigan	2024
MSU/UM EEE Day Conference, Michigan State University	2024
Student Summer Seminar, University of Michigan	2024
International/Macro Lunch Seminar, University of Michigan	2023, 2024
Korea's Allied Economic Associations Annual Meeting, South Korea	2019
The Korean Association of Public Finance, South Korea	2018

# PERSONAL INFORMATION AND SKILLS

Computational Skills: MATLAB, Stata, Python, R, ArcGIS

Languages: English (fluent), Korean (native)

Citizenship: U.S and South Korea

## **REFERENCES**

Andrei A. Levchenko (co-chair)	Sebastian Sotelo (co-chair)	Costas Arkolakis
Professor	Associate Professor	Professor
Department of Economics	Department of Economics	Department of Economics
University of Michigan	University of Michigan	Yale University
alev@umich.edu	ssotelo@umich.edu	costas.arkolakis@yale.edu

# "Global Fisheries: Quantifying the Externalities from Open Access" (Job Market Paper)

The tragedy of the commons has long been studied in economics, yet estimating its economic impact remains challenging. I address this gap by leveraging a novel spatial dataset on global fisheries. In this paper, I quantify the externalities from open access to fishery and show how far the real-world policy is from the optimal policy. I first show that i) the average global fishery stock decreased by 35% between 1980 and 2018, ii) lack of property rights is associated with overfishing, and iii) fuel subsidies to vessels are positively correlated with high sea fishing. Then, I build a dynamic quantitative spatial model of global fisheries. I compare two polar cases of open access with the model: the decentralized equilibrium where atomistic firms have no property rights and the optimal allocation where planner has property rights over the global fishery. By taking the model to the data, I find that the average global fishery stock increases by 88% and the net present value of global welfare increases by 0.11% under the planner compared to decentralized equilibrium. Through the policy counterfactual, I find that fuel subsidies are globally welfare-reducing. While fuel subsidies are targeted to high sea, the average stock increases at both high sea and territorial sea by 10.3% and 2.8%. These findings underscore the significance of well-targeted production and trade policies.

**"Deforestation: A Global and Dynamic Perspective"**, with Farid Farrokhi, Heitor Pellegrina, and Sebastian Sotelo

We study deforestation in a dynamic world trade system. We first document that between 1990-2020: (i) global forest area has decreased by 7.1 percent, with large heterogeneity across countries, (ii) deforestation is associated with expansions of agricultural land use, (iii) deforestation is larger in countries with a comparative advantage in agriculture, and (iv) larger population growth leads to deforestation. We build a model in which structural change and comparative advantage determine the extent, location, and timing of deforestation. We show analytically and quantitatively that, if agriculture is complementary in demand to other sectors, global reductions in trade costs reduce global deforestation, even if such shocks increase deforestation when experienced only by an individual economy. In our calibrated model, a 30 percent reduction in global agricultural trade costs increases steady-state forest share for world area by 0.5 percentage points, taking decades to occur. In the cross-section, countries with a comparative advantage in agriculture expand production at the expense of more deforestation there.

**"Playing with Blocs: Quantifying Decoupling"**, with Barthélémy Bonadio, Zhen Huo, Andrei Levchenko, Nitya Pandalai-Nayar, Hiroshi Toma, and Petia Topalova

We develop a data-driven way to measure trade fragmentation over the period 2015-2023. We assign countries to the US bloc, China bloc, or to an unaligned group based on whether their trade costs with the US and China increased or decreased over this period. We find that the US bloc and the China bloc each contain roughly a quarter of the countries in the world, with about half the countries remaining unaligned. We then use a quantitative model to simulate the real GDP and real income effects of decoupling. Because within-bloc trade costs fell at the same time as across-bloc trade costs increased, the change in the global trade costs over the period 2015-2023 increased global GDP and real income for the median country by about 0.6%. This is contrary to the widespread belief that fragmentation has been welfare-reducing. Finally, we find that countries in the US bloc would on average benefit from moving to the China bloc, and vice versa, though the real income impacts of moving blocs always range from positive to negative across countries. These results suggest that political alignment does not always follow trade-related economic interests.