# J. Kenneth Jung

Ph.D. Candidate in Economics

Address Contact

30 Hillhouse Ave
Department of Economics
Yale University

Phone: +1-(336)-745-0714
Email: ken.jung@yale.edu
Web: jkennethjung.github.io

### **Research Interests**

Primary Fields: Industrial Organization, Environmental and Resource Economics

### **Education**

Yale University, New Haven, CT

Ph.D., Economics

M.Phil., Economics

2025-2026 (expected)

2022

M.A., Economics

2021

### University of Chicago, Chicago, IL

B.A., Economics 2017

### **Dissertation**

Title: Essays in Industrial Organization and Resource Economics

# **Comprehensive Examinations**

**Oral:** Industrial Organization, Political Economy **Written:** Microeconomics, Macroeconomics

#### Research

### Job Market Paper

"Moral Hazard in Resource Extraction: Evidence from the Mountain Pine Beetle Outbreak"

## **Work in Progress**

"Additionality and Leakage in Equilibrium" with Andrew Vogt

"Aircraft Leakage under Cap and Trade" with Meichen Chen and Miho Hong

# **Teaching Experience**

#### Yale College

Teaching Assistant Spring 2025

Introduction to Data Science and Econometrics (Prof. John Eric Humphries)

Teaching Assistant Fall 2023–Spring 2024

The Senior Essay (Prof. Rebecca Toseland)

Teaching Assistant Spring 2023

Intermediate Econometrics (Prof. Edward Vytlacil)

Teaching Assistant Fall 2022

Environmental Economics (Prof. Robert Mendelsohn)

Teaching Assistant Spring 2022

Industrial Organization (Prof. Philip Haile)

Teaching Assistant Fall 2021

Intermediate Microeconomics (Prof. Evangelia Chalioti)

# Research Experience

Research Assistant Summer 2023

Yale University (Prof. Nicholas Ryan)

Research Assistant 2017–2019

Massachusetts Institute of Technology (Prof. Amy Finkelstein)

### **Presentations**

Conference and Seminar Presentations: London School of Economics and Political Science,

Environment Camp 2025

**Prof. Steven Berry** 

University of Colorado at Boulder, Environmental and Resource Economics Workshop 2023

## **Professional Service**

Referee Service: American Economic Review

### **Additional Information**

**Languages:** English (native), Korean (intermediate), French (beginner)

### References

Prof. Katja Seim Prof. Philip Haile

Yale University
Department of Economics
Yale University
Department of Economics

New Haven, CT 06520 New Haven, CT 06520 **Phone:** 203-432-5487 **Phone:** 203-432-3568

#### Prof. Kenneth Gillingham

Yale University Yale University

School of the Environment Department of Economics New Haven, CT 06520 New Haven, CT 06520

**Phone:** 203-436-5465 **Phone:** 203-432-3556

# Moral Hazard in Resource Extraction: Evidence from the Mountain Pine Beetle Outbreak [Job Market Paper]

Abstract. Natural resource owners often design and auction the rights to extraction contracts not only to raise revenue, but also to achieve other resource management goals of interest. I study the tradeoff between revenue and the timing of extraction in the context of the mountain pine beetle outbreak, a climate-induced shock that increased the urgency of timely harvests in infested forests and eventually killed about half of British Columbia's merchantable timber supply. I show that the use of a negligible fixed price for the harvest of low-grade timber succeeded in ensuring the salvage of beetle-killed trees. but also made it profitable for loggers to delay the harvest of attacked forests. This delay ran counter to the province's goals by allowing pupating beetles to mature, posing an externality by threatening to neighboring forests. A regression discontinuity for payment formats in timber auctions reveals that harvests in tracts that charge low-grade logs at the fixed price are 3.6 months more delayed. To measure the effects of counterfactual pricing schemes, I estimate (in progress) a dynamic resource extraction model and show how the timing of harvests depends on tract characteristics, including the severity of beetle attack. I use the model to quantify the delay reduction and revenue loss from counterfactual pricing and term length policies. I show that the province's contract designs were frequently interior of the optimal frontier between revenue and delay, indicating substantial gains to alternative pricing policies targeted toward beetle-infested tracts.