### **ALISON PEI**

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**Education Duke University** 2019 - 2024

Ph.D. in Economics & Public Policy

Cornell University 2017 - 2019

M.S. in Applied Economics and Management

Nankai University 2013 - 2017

B.A. in Economics

Fields Labor Economics; Industrial Organization

**References** Professor Matthew S. Johnson Professor Daniel Yi Xu

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Professor M. Kate Bundorf Professor Ashish Arora kate.bundorf@duke.edu ashish.arora@duke.edu

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Job Market Paper Monopsony in the High-Skilled Migrant Labor Market: Evidence from H-1B Petition Data (with Seohee Kim)

Abstract: This paper assesses the extent of monopsony power in the labor market for highly skilled immigrants, focusing on employment concentration and its impact on wages. We obtained the universe of H-1B visa petitions, the largest high-skilled immigration program in the U.S., through a FOIA request. We first discover that the H-1B labor market is 30% more concentrated than the broader U.S. labor market, with a steadily increasing trend over the past decade. We then examine the causal impact of high employment concentration on H-1B workers' wages by leveraging the lottery system for over-the-cap H-1B applications. The random lottery win rates in each market alter employment concentration, as different-sized firms vary in demand for first-time H-1B applicants, the only group subject to the lottery. Our results indicate that transitioning from the 25th to the 75th percentile of employment concentration results in a 12.2% wage decline, equivalent to a \$10.5k salary loss for the median H-1B worker. The wage effects of concentration are primarily borne by first-time H-1B applicants, whose visa status is tied to a single employer. As a suggestive mechanism to these wage effects, we also find evidence that higher concentration leads to less job mobility between H-1B employers. These findings collectively suggest that H-1B policy reform should consider lifting the employer tie for first-time applicants.

**Working Paper** 

**Innovation and the Enforceability of Noncompete Agreements** (with Matthew S. Johnson and Michael Lipsitz) [NBER Working Paper #31487]

Abstract: Worker mobility across firms can enhance innovation by spreading knowledge, but such mobility may also hinder innovation by making firms reluctant to invest in R&D. A common way that firms limit workers' mobility is with noncompete agreements (NCAs). We examine how the legal enforceability of NCAs affects innovation, as measured by patenting, using data on every state-level NCA enforceability change between 1991–2014. We find that making NCAs easier to enforce ("stricter" enforceability) substantially reduces the rate of patenting: an average-sized increase in

NCA enforceability leads a state to have 16-19% fewer citation-weighted patents over the following 10 years. This effect reflects a true loss in innovation rather than a reduction in useless or strategic patents. We then reconcile these findings with contrasting theoretical predictions. Stricter NCA enforceability reduces job mobility and new business formation in innovative industries, suggesting slower knowledge spread. Within publicly-traded firms, stricter NCA enforceability increases investment, but still leads to less innovation, suggesting that any gains from enhanced incentives to invest are more than offset by other ways that NCAs slow down innovation. Finally, using variation in technology classes' exposure to NCA enforceability changes, we show that the economy-wide losses to innovation from strict enforceability are even larger than what our state-level estimates imply.

# Papers in Progress

**OSHA Inspections, Productivity, and Management** (with Nicholas Bloom, David Levine and Matthew S. Johnson)

### Research Experiences

Research Assistant to Professor Matthew S. Johnson (U.S. Census 2021-present Special Sworn Status Researcher)

- Extracted pertinent data from U.S. census databases containing 10 billion+ observations using SAS and SQL
- Enhanced census data by integrating it with external firm-level injury data with fuzzy string matching (cosine similarity)
- Demonstrated proficiency in coding and data analysis using Stata and R within Linux and Windows environments

Research Assistant to Professor Kaushik Basu

• Game Theory modeling and its applications to affirmative action
Research Assistant to Professor Nancy Chau

2017-2018

• Dynamic network visualization and analysis in textile trading

## Teaching Experiences

PUBPOL 801: Microeconomics in Public Policy (MPP)

• TA for Professor Matthew S. Johnson

AEM 1200: Introduction to Business Management

2019

TA for Professor David TaylorSection III instructor (20 students)

ECON 1110: Introductory Microeconomics

• TA for Professor Jennifer Parker Winssink

• Section I lecturer (36 students)

### Industry **Experience**

Analysis Group, Intern Associate

- Provided retrospective merger analysis for CA DOJ, specializing in estimating the impact of medical group mergers through the use of DiD model and Propensity Score Matching to create relevant control groups
- Collaborated cross functionally with data scientist team to develop Python code for scraping physician profiles from 100+ medical group websites, generating the primary dataset used for market share analysis
- Contributed to expert testimony in a high-profile antitrust case by producing a pivotal section utilizing horizontal product differentiation models, resulting in high satisfaction from both clients and experts

## Conferences & Seminars

Imperfect Competition in the Labor Market Workshop - IAB Nuremberg2023The Society of Labor Economists (SOLE) 2023 Conference2023Migration and Organizations Conference - The Wharton School2022

2018-2019

2019

2023

	APPAM Fall Research Conference NBER Summer Institute - Entrepreneurship Research Boot Camp Western Economics Association Annual Conference Midwestern Economics Association Annual Conference Development Policy Research Unit (DPRU) Workshop - University of Cape Town	2022 2022 2021 2021 2019
Fellowships & Awards	Entrepreneurship Policy Fellowship, Association for Public Policy & Management (APPAM)	2022
Tivalus	Competitive Summer Research Fellowship, The Graduate School of Duke University	2021-2022
	Domestic Research Travel Award, Sanford School of Public Policy	2021-2022
	Teaching Assistantship for Master's Student, Cornell University	2019
	Erasmus Exchange Program Fellowship, China Scholarship Council	2017
	National Scholarship, Nankai University	2016
Research Grants	Alfred Sloan Foundation G-2023-21018 "The Effects of Non-compete Agreement Enforceability on Innovation and Entrepreneurship", \$50,000, Co-PI with Matthew S. Johnson	2023
Professional	Referee for American Economic Journal: Economic Policy	2022
Services	Graduate and Professional Student Government Representatives, Duke University - Sanford School of Public Policy	2022- present
	Diversity and Inclusion Committee, Duke University - Department of Economics	2020-2021
	Women in Economics, Duke University - Department of Economics	2020-present
Languages	English; Mandarin	
Programming	Python (Numpy, Pandas, BeautifulSoup), Stata, R, SQL, SAS, MATLAB	