

DISSERTATION PROPOSAL

Pei Xue

“Papers of Labors and Migration”

Thursday, December 12, 2024
10:30am
Tepper 5219

This paper investigates the heterogeneous impacts of the H-1B lottery system on high-skilled foreign workers. The first chapter employs causal inference techniques to estimate the heterogeneous treatment effects of the lottery system on different countries. Using data from the Bureau of Consular Affairs and the World Bank's World Development Indicators, this paper reveals substantial variation in how countries respond to the lottery policy. Early results indicate that certain countries experience significant increases in visa approvals during lottery years, while others show declines or more muted effects. This paper provides a foundational understanding of the factors driving disparities in migration patterns.

The second chapter proposes a general equilibrium model that captures the interplay between the demand for foreign labor by U.S. firms and the migration decisions of high-skilled workers. This model examines migration decisions alongside the hiring strategies of U.S. firms, reflecting the interaction of supply and demand forces in the labor market. By clustering countries based on shared socio-economic characteristics, the model captures variations in migration preferences and outcomes. This model will be estimated to analyze current policy dynamics and examine several counterfactual scenarios to understand how the demand and supply of high-skilled foreign labor might shift under different policy designs and varying circumstances in home countries.

The third chapter investigates the bi-directional causal link between educational investment and geographic mobility in the U.S. Using data from the American Community Survey (2015-2019), the study finds that STEM graduates demonstrate significantly higher mobility, compared to graduates of several non-STEM majors which exhibit patterns similar to those who have not pursued higher education. Additionally, a dynamic discrete choice model is developed to simulate individual decision-making regarding college major, occupation, and location, which demonstrates how future occupational and locational expectations influence college major choices and migration trends.

Proposed Committee: Robert Miller (Chair), Brian Kovak, Rebecca Lessem, and Tim Ederer

Proposal Documents:

https://drive.google.com/drive/folders/1vE987bPNUYdaL9rzTadds43N3G0zlbWp?usp=drive_link