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Fields of Concentration:

Primary Field(s): Labor Economics

Secondary Field(s): Development Economics

Examinations Completed

2022 (Oral): Labor Economics, Development Economics

Dissertation Title: *Essays on Technology, Skills, and Labor-Market Adjustment*

Committee:

Professor Mark Rosenzweig (Chair)

Professor Orazio Attanasio

Professor Barbara Biasi

Education:

Ph.D., Economics, Yale University, 2027 (expected)

M.Phil., Economics, Yale University, 2024

M.A., Economics, Yale University, 2023

B.A., Economics and Mathematics, Yale University, 2018

Fellowships, Honors and Awards:

Cowles Foundation Fellowship, Yale University,

2021 - 2025

Yale Graduate Fellowship, Yale University,

2021 - 2026

Institute for Humane Studies Fellowship,

2023

Kingsley Trust Fellowship,

2026

Research Grants:

2025 Cowles Foundation Research Grant, \$30,000

2023 Robin E. Evenson Fund, Economic Growth Center, \$2,500 USD

Teaching Experience:

Fall 2023: Teaching Assistant to Prof. Yusuke Narita, ECON 1123, Intermediate Econometrics and Data Analysis, Yale College
Fall 2024: Teaching Assistant to Prof. Benjamin Polak, ECON 2159, Game Theory, Yale College
Spring 2025: Teaching Assistant to Prof. Penny Goldberg, ECON 1115, Introductory Microeconomics, Yale College
Fall 2025: Teaching Assistant to Prof. Benjamin Polak, ECON 2159, Game Theory, Yale College

Research Experience:

Research Assistant, Prof. Orazio Attanasio, Yale University, 2023 - 2024
Research Assistant, Prof. Yusuke Narita, Yale University, 2023

Work Experience:

Research Assistant, International Monetary Fund, Washington, DC, 2019 - 2021

Publications:

Boz et al. (2022). "Patterns of Invoicing Currency in Global Trade: New Evidence." *Journal of International Economics*, 136, 103604.

Working Papers:

"Workforce Demographics and New Software Adoption," with Sabrina Peng, Job Market Paper, November 2026.

Work In Progress:

"Perceived Education Returns Abroad and Investment at Home," with Emma Naslund-Hadley, Siu Yuat Wong, and Qian Yao Ye, November 2026.

Languages:

Vietnamese (native), English (native), Chinese (fluent)

References:

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Dissertation Abstract

“Workforce Age Structure and Frontier Technology Adoption: Evidence from Newly Released Software”, with Sabrina Peng [Job Market Paper]

Workforce aging is often viewed as a drag on economic growth because it reduces labor supply and raises old-age dependency. But aging may also affect growth through a less studied channel: the speed at which economies adopt new technologies. If older workers are less likely to learn new tools, then older labor markets may adapt more slowly when new technologies arrive. Despite the importance of this channel for productivity growth, there is little systematic quantitative evidence on whether workforce age composition affects technology adoption.

This paper fills this gap by estimating the causal effect of local workforce age composition on firms’ adoption of newly released software technologies in the United States, instrumenting the local old-worker share with a Bartik-style measure constructed from historical commuting-zone age composition and national survival rates while allowing for a rich set of controls. We use Lightcast job postings to track local employer demand for 15 newly released software technologies between 2012 and 2016, each matched to an older technology used for similar tasks. Technology adoption is measured by employer demand for frontier software skills, and workforce age composition is measured by the local share of college-educated workers ages 50 to 69.

The empirical results show that, within five years of release, employers in older labor markets post increasingly fewer vacancies requiring the newest software technologies. Moreover, the estimates indicate that the age-related adoption gap is larger when the new software is more difficult to master.

To explain our empirical findings and evaluate policy counterfactuals, we develop and calibrate a simple model linking workers’ retraining decisions to firms’ demand for frontier-technology skills. The key mechanism is finite-horizon retraining: because older workers have shorter remaining careers, they have less time to recover learning costs, making the same skill investment less attractive late in the career. The calibrated model shows that policy margins changing workforce age structure can have different implications for technology adoption. Aging caused by weak inflows of young workers, as under low fertility or low migration, slows adoption by reducing the share of workers with long retraining horizons. By contrast, longer expected working lives, as under delayed retirement, can mitigate this force by increasing older workers’ return to skill investment.

“Perceived Education Returns Abroad and Investment at Home,” with Emma Naslund-Hadley, Siu Yuat Wong, and Qian Yao Ye [Work in Progress]

Migration is a central economic strategy for many Central American households, including Salvadoran families whose children may later consider migrating to the United States. The possibility of migration can shape educational investment long before migration occurs by changing how families perceive the returns to schooling. In a household survey conducted in El Salvador, we find that caretakers of children ages 8 to 12 substantially overestimate wages in the United States, especially for workers with secondary schooling, by more than 300 percent. Respondents also overestimate the return to education in the United States relative to El Salvador, and these perceived U.S. returns are strongly associated with the amount of time parents spend helping children with schoolwork. These patterns suggest that beliefs about foreign labor-market opportunities may shape human-capital investment at home.

Building on this evidence, the project studies how perceived returns to education abroad, perceived migration costs and barriers, and domestic education returns jointly affect children’s schooling investments and household migration decisions. The empirical design uses a

randomized information experiment with caretakers of school-age children in El Salvador. Participants receive experimentally varied information about U.S. wages for Salvadorans, migration success probabilities, wage uncertainty, and returns to education in El Salvador. The experiment measures how these information treatments change beliefs, migration intentions, and willingness to invest in supplemental education. The project tests a central mechanism in the brain-gain hypothesis: whether the possibility of migration raises education investment before migration occurs, and whether families respond more strongly to information about foreign earnings, migration risk, or domestic returns to schooling.