

# Peiran Cheng

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## Education

Northeastern University, Ph.D. in Economics, Boston, USA <i>Dissertation Committee: Mindy Marks (Chair), Alicia Sasser Modestino, Shantanu Khanna</i>	Sept 2021 – May 2026
University of Wisconsin - Madison, MS in Economics, USA	2019 - 2021
Xi'an Jiaotong University, MA in Finance; BA in Finance( <i>magna cum laude</i> ), China	2013 - 2019

## Research Interests

Labor Economics, Health Economics, Economics of Education, Public Finance, Technological Change/AI

## Research

**Balancing Budgets, Limiting Access: The Impact of State Appropriation Cuts on Public University Decisions**  
(Job Market Paper), Peiran Cheng. Accepted at the SOLE Conference.

- State appropriations are a central source of funding for public higher education in the United States, and fluctuations in these transfers play a critical role in shaping universities' decisions. This paper examines how changes in state appropriations, in conjunction with economic downturns and booms, affect higher education outcomes. I implement an instrumental variables strategy using institution-level panel data from 2002 to 2019. I find that institutions in states with stricter balanced budget requirements experience a sharper cut in state appropriations during and immediately following the economic downturns, whereas institutions in states with weaker requirements can smooth adjustments over time. In response to these appropriation cuts, universities reduce undergraduate enrollment, raise tuition, and shift the composition of majors toward lower-cost fields.

**Reducing the Supply of Unused Opioids: An Evaluation of a Community Health Center Opioid Return Program.** Alicia Sasser Modestino, Peiran Cheng, Gary Young, Muhammad Noor E Alam, Alicia Mam Dacunha, Else Laflamme. Submitted to **AEJ: Economic Policy**. Presented at APPAM.

- More than one-third of opioid-related deaths are attributed to secondary users of prescription opioids with two-thirds obtaining painkillers from family and friends. Using a randomized control trial, we test the effectiveness of a community-based medication return program. Treated patients were 3.0 percentage points more likely to return medication relative to the control group, yet these effects remained small even when coupled with a text reminder, financial incentive, mail back envelope, or clinician involvement. Our results suggest that while medication return programs may remove opioids from some households, they are unlikely to meaningfully reduce the supply of opioids within a community.

**Evaluating The Impact of an Income Shock on Crime: Evidence from 2021 Child Tax Credit Expansion**, with Shenghao Peng

- This paper investigates how a temporary income shock brought about by the 2021 expansion of the U.S. Child Tax Credit (CTC) affects local crime rates. The expanded CTC provide temporary income shock to low-income households with children. Using administrative arrest data from the 2021–2022 National Incident-Based Reporting System (NIBRS) and a difference-in-differences framework, we exploit cross-county variation in exposure to the CTC driven by number of eligible children and household income. We find that each additional \$1,000 in CTC payments received by eligible families at the county level is associated with 0.15 more arrests per 1,000 residents. We detect no effect on violent offense arrests and a small negative effect on property offense arrests. The results are consistent with previous literature where cash transfers show little or no clear reduction in crime.

## Work in Progress

**The Impact of Generative AI on Job Opportunities for Junior Software Developers**  
with Alicia Sasser Modestino and Samuel Westby

- Using the public release of Chat-GPT in November 2022 as a natural experiment, we explore the effects of generative AI on the software developer job market, documenting three new stylized facts. First, using the near-universe of online job vacancies, we find the widespread introduction of generative AI resulted in a 16.3

percent drop in the relative proportion of junior- versus senior-level software developer job vacancies. Second, we find that the relative decline in labor demand for junior- versus senior-level software developers appears concentrated among larger firms and bigger cities while industries with moderate exposure to the software industry were more insulated from the effects of Chat-GPT. Third, we reveal alternative career pathways for potentially displaced junior software developers using an occupation similarity network to identify credible job opportunities for junior software developers that require minimal re-skilling. Our findings are consistent with both recent industry observations as well as the vast literature on skill-biased technological change, reinforcing the notion that technological disruptions do not uniformly eliminate employment but rather reshape the labor market.

## Seminars and Conference Presentations

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### 2026

"Balancing Budgets, Limiting Access: The Impact of State Appropriation Cut on Public University Decisions" presented in:

Society of Labor Economists (SOLE) Annual Meeting, Denver, CO.

### 2025

"Reducing the Supply of Unused Opioids: An Evaluation of a Community Health Center Opioid Return Program" presented in:

Association For Public Policy Analysis & Management (APPAM), Seattle, WA;

Community to Community (C2C) Research Seminar, Boston, MA;

Workshop in Economics Department at Northeastern University, Boston, MA

### 2023-2025

"Evaluating The Impact of an Income Shock on Crime: Evidence from 2021 Child Tax Credit Expansion"

presented in:

Workshop in Economics Department at Northeastern University, Boston, MA

## Teaching/Research Experience

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### Teaching(Northeastern University)

- Instructor: Econ 1116 Principles of Microeconomics (4.61/5.00) Summer 2025  
(above the department and university average)
- Recitation Leader: Econ 1126: Principles of Microeconomics Spring 2025, Fall 2025

### Teaching Assistant (Northeastern University)

- ECON 2560 Applied Econometric Spring 2023
- ECON 3412 Women's Labor and the Economy Spring 2022
- ECON 3410 Labor Economics Fall 2021

### Research Assistant(Northeastern University)

- Research Assistant, Community to Community (C2C) Program Jun 2023 - present
  - Evaluating the Community to Community Summer Job Program
- Research Assistant, Opioid Buyback Program Jun 2022 - present

## Fellowships and Awards

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| Doctoral Fellowship, Department of Economics, Northeastern University  | 2021-2026 |
| Graduate Scholarship, Department of Finance, Xi'an Jiaotong University | 2017-2019 |
| Siyuan Scholarship, Department of Finance, Xi'an Jiaotong University   | 2013-2017 |

## Other Information

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**Languages:** Mandarin Chinese(native), English (fluent)

**Technologies:** Stata, R-studio, Matlab, Python

**Citizenship/Visa Status:** China/F1

## References

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**Mindy Marks (Chair)**

Associate Professor

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Ph.D Director

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**Alicia Sasser Modestino**

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