

Xiaonan (Steve) Ma

Department of Economics	Homepage: https://steveshelnanma.github.io
University of Rochester	Email: xiaonan.ma@rochester.edu
Rochester, NY 14627	Phone: (585) 978-6950

Education

Ph.D., Economics, University of Rochester , 2025 (expected)

M.A., Economics, Tsinghua University, 2019

B.A., Economics, Peking University, 2016

B.B.A., Management Information Systems, Beijing Technology and Business University, 2015

Research Fields

Macroeconomics, Labor Economics, Search and Matching

Working Paper

Earnings Cuts Upon Transitions and the Role of Stepping-stone Employers (*Job Market Paper*)

A Simple Search Model with Employer Network

Human Capital, Job Ladders, and Life-Cycle Labor Supply, *with Paulo Lins*

Work-in-Progress

Anatomy of Motivations for Transitions

On the Dynamics of Hours and Wage Distributions

Presentations

2025: ESWC 2025*, NBER SI 2025*, Hong Kong Baptist University, City University of Hong Kong, Xiamen University, Liaoning University

2024: FSRDC Annual Research Conference (University of Utah), Macro Workshop (University of Rochester), Search and Matching Workshop in the Asia-Pacific (National University of Singapore)

* Accepted for presentation

Research Experience

Special Sworn Status Principal Investigator (PI), U.S. Census Bureau, 2022-present

Research Assistant for Prof. Narayana Kocherlakota, University of Rochester, 2021

Research Assistant, Tsinghua University 2017-2019

Research Assistant, Peking University 2014

Teaching Experience

University of Rochester

Instructor:

Intermediate Macroeconomics, 2022 Summer

Teaching Assistant:

Intermediate Macroeconomics by Prof. Hamid Firooz, 2023 Fall

Economics of Globalization by Prof. Gaston Chaumont, 2023 Spring

Money, Credit, and Banking by Prof. Narayana Kocherlakota, 2022 Spring/Fall

Pricing Policies by Prof. Greg Shaffer, 2022 Spring/Fall

Economic Statistics by Prof. Nese Yildiz, 2021 Fall

Honors and Fellowships

Professional Development Funding, University of Rochester, 2024

Conference Travel Grant, University of Rochester, 2024

Summer Research Fellowship, University of Rochester, 2023, 2024

Conibear Prize for the best third-year paper, 2022

Data Research Grant, University of Rochester, 2022, 2023

Summer Research Grant, University of Rochester, 2021

McKenzie Fellowship, University of Rochester, 2019-2024

Tachiki Graduate Scholarship, Tsinghua University, 2017, 2018

Miscellaneous

Language: English (fluent), Mandarin (native), Japanese (novice)

Programming: Julia, MATLAB, Python, Stata, R, EViews, SAS

References

Mark Bills (Advisor)

Department of Economics
University of Rochester
Rochester, NY 14627, USA.
mark.bills@rochester.edu

Yan Bai

Department of Economics
University of Rochester
Rochester, NY 14627, USA.
yan.bai@rochester.edu

Narayana Kocherlakota

Simon Business School
University of Rochester
Rochester, NY 14627, USA.
nkocherl@simon.rochester.edu

Papers and Abstracts

Earnings Dynamics, Transitions, and Stepping-stone Employers (Job Market Paper)

This article studies the prevalent earnings cuts upon transitions (ECUTs) in the U.S. labor market. Using data from the Longitudinal Employer-Household Dynamics and the National Survey of College Graduates, I identify workers' transition motivations and quantify ECUTs by motivation type. Pecuniary motivation dominates, yet many movers reporting it as the sole motivation still experience ECUTs. Further analyses shows that workers who transition for pecuniary reasons have higher future earnings growth and higher probability of subsequent transitions. I argue that certain employers function as "stepping-stones" by offering better prospects for moving to better employers. Pursuing stepping-stone employers thus represents a pecuniary motivation for job transitions and partially explains ECUTs. To formalize this mechanism, I develop a random search model where employers differ in quantity and quality of job offer arrival rates. The stepping-stone employers, often overlooked in the literature, are pivotal in the context of ECUTs and labor market dynamics.

A Simple Search Model with Employer Network

This article examines how employer network structures influence labor market outcomes using a simple search model. Employers are represented as network nodes, with edges reflecting higher job offer arrival rates. We establish the existence and uniqueness of a "node value," the expected lifetime value of using an employer's network for job search. This node value, akin to an option asset, increases with favorable wage distribution characteristics and mean-preserving risk spreads. Similar to network centrality, node value rises with an employer's connections and the node values of connected employers, making central employers more desirable for job seekers. As a result, employer network structures directly impact employment, labor mobility, and wage distributions, also explaining phenomena like worker mobility to lower-wage positions. This model underscores the importance of network topology in shaping labor market dynamics.

Human Capital, Job Ladders, and Life-Cycle Labor Supply (with Paulo Lins)

We document new facts about the behavior of total annual hours over the life cycle using NLSY79 data and show that current life-cycle models fail to explain these patterns. In the data, both the intensive and extensive margins of labor supply are equally important, each contributing 50% to the life-cycle growth in total annual hours. We propose a life-cycle model that nests different theories used to explain the hours' profile and calibrate it to reproduce our empirical evidence. Both human capital accumulation and a job ladder are needed to account for the data patterns, while versions with only one ingredient fail to explain labor supply over the life cycle. Through counterfactual exercises, we find that human capital accumulation is the primary driver of wage growth in the early stages of a worker's career, while job search significantly contributes to hours growth.