### Jaeeun Seo

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#### EMPLOYMENT

• Postdoctoral Scholar, Northwestern University

2024-

#### **EDUCATION**

• Massachusetts Institute of Technology (MIT)

2024

Ph.D. in Economics

#### References

Professor Arnaud Costinot MIT Department of Economics 77 Massachusetts Avenue, E52-534 Cambridge, MA 02139 617-324-1712 costinot@mit.edu Professor George-Marios Angeletos Northwestern University Kellogg Global Hub, #3389 Evanston, IL 60208 847-491-8217 angeletos@northwestern.edu

Professor Dave Donaldson MIT Department of Economics 77 Massachusetts Avenue, E52-552 Cambridge, MA 02139 617-258-6242 ddonald@mit.edu

# • Seoul National University

2018

Bachelor in Economics, Mathematics, and Industrial Engineering  $Summa\ Cum\ Laude$ 

#### FIELDS

- Primary Field: International Trade
- Secondary Fields: Macroeconomics, Urban Economics

#### TEACHING EXPERIENCE

• International Economics I (graduate, MIT course 14.581) 2020 Teaching Assistant to Professors David Atkin, Arnaud Costinot, and Dave Donaldson

• Introduction to Macroeconomics (undergraduate, MIT course 14.02) 2020-22, 2024 Teaching Assistant to Professors Martin Beraja, Ricardo Caballero, and James Poterba

# FELLOWSHIPS, HONORS, AND AWARDS

• Best Student Paper Prize, Urban Economics Association	2022
• MIT Department of Economics Fellowship	2018-20
• Doctoral Study Abroad Scholarship, Korea Foundation for Advanced Studies	2018-23
• Presidential Award, Seoul National University	2018
• National Merit Scholarship for Science and Engineering	2011-14

#### Professional Activities

• Referee: Journal of Urban Economics

#### • Presentations:

Seminar in Macroeconomics, Northwestern University	2024
Society of Economic Dynamics Annual Meeting	2024
London School of Economics and Political Science	2024
Tokyo University	2024
• Service: MIT Trade Lunch Organizer	2022-23

# RESEARCH PAPERS

• "Sectoral Shocks and Labor Market Dynamics: A Sufficient Statistics Approach" (Job Market Paper) (with Ryungha Oh)

In this paper, we develop a sufficient statistics approach to evaluate the impact of sectoral shocks on labor market dynamics and welfare. Within a broad class of dynamic discrete choice models that allows for arbitrary persistent heterogeneity across workers, we show that knowledge of steady-state sectoral worker flows over different time horizons is sufficient to evaluate the labor supply responses to shocks as well as their aggregate welfare consequences. We also establish analytically that assuming away persistent worker heterogeneity, a common practice in the existing literature, necessarily leads to overestimation of steady-state worker flows, resulting in systematic biases in counterfactual predictions. As an illustration of our sufficient statistics approach, we revisit the consequences of the rise of import competition from China. Using US panel data to measure steady-state worker flows, we conclude that labor reallocation away from manufacturing is significantly slower, and the negative welfare effects on manufacturing workers are much more severe than those predicted by earlier structural models without persistent worker heterogeneity.

• "What Causes Agglomeration of Services? Theory and Evidence from Seoul" (with Ryungha Oh) Awarded Best Student Paper Prize (2022) by the Urban Economics Association

Why are economic activities concentrated in space? What are the policy implications of this concentration? And how do we expect it to change in the future? We revisit these classic questions in the context of

non-tradable services, such as restaurants and retail, in Seoul. To understand the concentration of services, we first causally identify positive spillovers across services stores. We microfound these spillovers by incorporating the trip-chaining mechanism—whereby consumers make multiple purchases during their services travel—into a quantitative spatial model that endogenizes the spatial distribution of services. When calibrated to an original survey on trip chaining, this mechanism explains about one-third of the observed concentration. However, unlike standard agglomeration mechanisms, it does not lead to inefficiency nor it exacerbates welfare inequality. Finally, we show that spatial linkages of services consumption play a crucial role in shaping the impact of the rise of work from home and of delivery services on the distribution of services.

# • "Persistent Noise, Feedback, and Endogenous Optimism: A Rational Theory of Overextrapolation"

I propose a noisy rational expectations model with persistent noise. Firms learn about economic conditions from signals, and the noise in the signals is persistent rather than i.i.d. over time. Firms rationally account for the persistence of noise and update their interpretations of signals based on ex post observations of true economic conditions. I show that this process gives rise to a novel mechanism by which optimism arises endogenously, which in turn amplifies or dampens the effects of underlying shocks. In particular, this model can generate the delayed overreaction in firms' expectations documented in the literature, when firms are better informed about idiosyncratic shocks relative to aggregate shocks. Moreover, strategic complementarity between firms and the resulting higher-order optimism further strengthen my mechanism. Finally, I distinguish empirically my rational theory of optimism from behavioral theories by exploiting the difference in the degree of overextrapolation between consensus and individual forecasts.

#### RESEARCH IN PROGRESS

#### • "Employment Dynamics and Sectoral Misallocation in Job Creation"

There is sectoral variation in where firms source their new hires—whether from unemployment pools or by poaching from other firms; and from which firms they poach. This paper develops a model that integrates job search both on- and off-the-job with sector choice decisions by workers and firms, where sectoral employment growth is endogenously shaped by the distribution of workers and firms across sectors. A key feature of the model is that hiring from other firms, rather than from unemployment pools, generates a negative worker-stealing externality. The extent of this externality depends on where new firms source their labor, which in turn depends on the patterns of employment dynamics. Calibrating the model to the U.S. data, I find significant variation in the magnutude of worker-stealing effects across sectors, leading to substantial misallocation in firm entry decisions and employment growth.

# • "Imperfect Screening and Unemployment in Frictional Labor Markets" (with Ryungha Oh)

In the Korean labor market, less productive workers are more likely to be employed by less productive firms, yet both groups similtaneously experience prolonged search times to find jobs and fill vacancies. To explain this phenomenon, we develop a model of frictional labor markets that combines imperfect screening and partially directed search, where heterogeneous firms post wages common to all applicants and hire workers based on noisy signals and heterogeneous workers decide where to apply. In equilibrium, majority of less productive workers apply to high-paying, more productive firms, anticipating the small chance that these

firms might mistakenly hire them over more qualified applicants. This opportunistic application behavior leads to higher unemployment rates among these workers. Simultaneously, less productive firms receive fewer applications and face difficulties in filling vacancies. We show that increased productivity gap between firms over time exacerbates the concentration of application in high paying firms, lowering overall employment rate and vacancy yield. Moreover, policies such as blind hiring or increased unemployment benefits may significantly amplify these problems by further distorting application behaviors.

### Additional Information

• Citizenship: Republic of Korea

• Gender: Male

• Languages: English (fluent), Korean (native)