

# JOO-HYUNG GRACE SHIN

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## EDUCATION

Columbia University

- Ph.D., Economics (2022, expected)
- M.Phil., Economics (2018)
- M.A., Economics (2017)

Yonsei University

- M.A., Economics (2015)
- B.A., Economics (2013)

University of California, Berkeley

- Undergraduate Exchange Program (Fall 2011 – Spring 2012)

## FIELDS OF SPECIALIZATION

Macroeconomics, Labor Economics

## JOB MARKET PAPER

### “Occupation Specificity and the Decline in the Aggregate Job Separation Rate”

*Abstract:* The long-run decline in the aggregate job separation rate in the U.S. has been documented in the literature. This paper analyzes the role of increasing occupation specificity in the falling aggregate job separation rate. I do a shift-share decomposition of the decline in the aggregate job separation rate to find that it is accounted mostly by the within-occupation increase in specificity. Then I build a search-and-matching model where the increase in specificity within occupations reduces job separations. The model predicts 60% of the decline in the aggregate job separation rate. When occupations become more specific, human capital acquired from one occupation becomes less transferable to a different occupation, resulting in larger wage cuts for occupation switchers. Occupation switchers also have to undergo a longer period of occupation-specific training in their new occupation, during which they earn low wages. In the model, after the increase in occupation specificity, workers separate less to avoid switching occupations, accepting lower wages at their current job at the same level of productivity.

## WORK IN PROGRESS

### “Occupation Specificity, Endogenous Occupation Switching, and Unemployment Duration”

*Abstract:* It is documented in the literature that the average unemployment duration has increased in the U.S. This paper analyzes how the increase in occupation specificity results in longer unemployment spells. I do a shift-share decomposition to find that the increase in the average unemployment duration is

driven by the within-occupation increase in specificity. Then I build a search-and-matching model where the increase in specificity within occupations lengthens unemployment duration. The model predicts all of the increase in the average unemployment duration. In the model, the longer unemployment spells are due to the unemployed trained workers, whose human capital have become more specific to their previous occupation, choosing not to switch occupations. If they switch occupations, they could quickly end their unemployment spell. This would however come at the cost of larger wage cuts because their human capital has become less transferable to a different occupation. Occupation switchers would also have to earn these lower wages for a longer period of time until they become trained in their new occupation. Hence, despite a low probability of getting reemployed in the same occupation as before, previously trained workers increasingly choose not to switch occupations, which increases the average unemployment duration.

## PUBLICATIONS

**“A Simple Correction of Gini Estimates Using Tax Return Data”** (with So-Hye Yoon and Tae-Hwan Kim), *The Review of Social & Economic Studies*, 2020, Vol. 63, No. 1, pp.1-38. (in Korean)

*Abstract:* The Gini coefficient is typically estimated using income data collected by surveying a group of randomly selected people. It is well known that people tend to under-report their income when asked about their income. As a result, the Gini coefficient is likely to be under-estimated. This paper investigates how to correct such a prevalent under-estimation problem occurring when estimating the Gini coefficient using survey data. We calculate top 1% income shares using tax return data, and use these results to correct the problem. Using our correction method, we have found the following: (i) the official Gini estimates announced by the National Statistical Office are under-estimated, (ii) the degree of income inequality might have become worsened over time than described by the official Gini estimates, and (iii) the extent of under-estimation is likely to be larger for South Korea than other OECD countries such as the U.S.

**“Top Income Shares Based on Household Income and Expenditure Survey Data”** (with Yunmi Kim and Tae-Hwan Kim), *The Korean Journal of Economics*, 2015, Vol. 22, No. 1, pp. 87-97. (in Korean)

*Abstract:* Following the methodology proposed by Piketty (2014), Kim and Kim (2015) have estimated top income shares in Korea based on income tax data published by the National Tax Service. However, a potential problem with tax data is that tax filers can have financial incentives to legally manipulate the way to report their income to minimize their tax liabilities. To reconcile the problem, Burkhauser et al. (2012) have used CPS data in the USA to compute top income shares and compared their results with the outcomes based on tax data. We have used the Household Income and Expenditure Survey data published by Statistics Korea to compute top income shares in Korea and compared our results with Kim and Kim (2015)’s results.

**AWARDS**

Dissertation Fellowship, Columbia University (2020 – 2021)  
Dean's Fellowship, Columbia University (2015 – 2020)

**TEACHING  
ASSISTANTSHIPS**

Graduate Level

- International Economics (Master's Level, Spring 2019)
- Macroeconomic Analysis II (Master's Level, Spring 2018)

Undergraduate Level

- Financial Economics (Fall 2019)
- Money and Banking (Fall 2017, Spring 2020)
- Intermediate Macroeconomics (Fall 2016, Spring 2017, Fall 2018)

**RESEARCH  
EXPERIENCE**

Columbia University

- Research Assistant to Professor Christian Moser (Summer 2016)

Lindau, Germany

- Young Scientist at the 5th Lindau Nobel Laureate Meeting on Economic Sciences (Summer 2014)

**OTHER  
EXPERIENCES**

The Yonsei Annals

- Monthly English college news magazine of Yonsei University
- Editor (Research, Photo, Campus Affairs, Global Affairs, Culture Divisions, Spring 2011)
- Reporter (Research Division, Fall 2009 – Fall 2010)

**PERSONAL**

Citizenship: United States, Republic of Korea

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International and Public Affairs  
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