

**WOORYONG LEE**

<https://wooyong.github.io/>  
[wooyong@uchicago.edu](mailto:wooyong@uchicago.edu)

**Office Contact Information**

1126 E. 59<sup>th</sup> Street – Saich Hall for Economics  
Chicago, IL 60637  
(773) 364 0570

**Placement Directors:** Professor Ufuk Akcigit, [uakcigit@uchicago.edu](mailto:uakcigit@uchicago.edu), (773) 702 0433  
Professor Alessandra Voena, [avoena@uchicago.edu](mailto:avoena@uchicago.edu), (773) 702 9127

**Graduate Student Coordinator:** Robert Herbst, [rherbst@uchicago.edu](mailto:rherbst@uchicago.edu), (773) 834 1972

**Personal Information:** Male, Republic of Korea (South)

**Education**

The University of Chicago, 2014 to present  
Ph.D. Candidate in Economics  
Thesis Title: “Identification and estimation of average effects in dynamic random coefficient models”  
Expected Completion Date: June 2020

M.Sc., Statistics, The University of British Columbia, 2014  
B.S., Economics, Korea University, 2012

**References:**

Professor Stéphane Bonhomme (Primary Advisor)	Professor Alexander Torgovitsky
University of Chicago <a href="mailto:sbonhomme@uchicago.edu">sbonhomme@uchicago.edu</a> , (773) 834 6831	University of Chicago <a href="mailto:torgovitsky@uchicago.edu">torgovitsky@uchicago.edu</a> , (773) 702 1569

Professor Guillaume Pouliot  
University of Chicago  
[guillaume.pouliot@gmail.com](mailto:guillaume.pouliot@gmail.com), (773) 834 0628

**Teaching and Research Fields:**

Primary fields: Econometrics

Secondary fields: Labor Economics

**Teaching Experience:**

Spring, 2018	Topics in Econometrics (graduate), University of Chicago, Teaching Assistant for Stéphane Bonhomme
Winter, 2018	Topics in Microeconomics (undergraduate), University of Chicago, Teaching Assistant for Thibaut Lamadon

Autumn, 2017	Topics in Microeconometrics (undergraduate), University of Chicago, Teaching Assistant for Thibaut Lamadon
Spring, 2017	Applied Microeconometrics (undergraduate), University of Chicago, Teaching Assistant for Juanna Schrøter Joensen
Winter, 2017	Topics in Microeconometrics (undergraduate), University of Chicago, Teaching Assistant for Thibaut Lamadon
Autumn, 2016	Topics in Econometrics (graduate), University of Chicago, Teaching Assistant for Stéphane Bonhomme
2012 to 2014	Elementary Statistics (undergraduate), University of British Columbia, Teaching Assistant for Eugenia Yu

### **Research Experience and Other Employment:**

Summer, 2014    University of British Columbia, Research Assistant for Nancy Heckman

### **Honors, Scholarships, and Fellowships:**

2019                Reid Economics Fellowship  
2014 to 2019       Social Sciences Fellowship  
2012 to 2014       International Partial Tuition Scholarship

### **Professional Activities:**

#### Conference and Seminar Presentations:

2019                Optimization-Conscious Econometrics Conference

### **Language and Computer Skills:**

#### Computer Skills:

R, C++, Matlab, Stata

#### Languages:

English (Fluent), Korean (native)

### **Publications:**

Lee, W., Greenwood, P. E., Heckman, N., & Wefelmeyer, W. (2017). Pre-averaged kernel estimators for the drift function of a diffusion process in the presence of microstructure noise. *Statistical Inference for Stochastic Processes*, 20(2), 237-252.

### **Job Market Paper:**

“Identification and estimation of average effects in dynamic random coefficient models”

Dynamic fixed effect models are popular in empirical research. However, they allow for unobserved heterogeneity only in the intercept but not in the coefficients, although the coefficients are important parameters such as Cobb-Douglas coefficients of firm's production function or return to education in Mincer equation. This paper studies a dynamic fixed effect model where both its intercept and coefficients are heterogeneous, which is called a dynamic random coefficient model. It is shown that the model is partially identified when the length of panel data is fixed, and the sharp identified set of the model is characterized. The characterization does not require any support restriction. A computationally feasible estimation and inference procedure is proposed, which is applied to life-cycle earnings and consumption dynamics using Panel Study of Income Dynamics (PSID) dataset. The estimates suggest that there is large heterogeneity in earnings persistence and consumption behavior across households and that there is correlation between the

two. A calibration of structural life-cycle model is performed to make sense of the estimation results.