

dakel@princeton.edu | https://dakeli.weebly.com | +1 (609) 937 2990

#### PRINCETON UNIVERSITY - DEPARTMENT OF ECONOMICS

Placement Officer : Gianluca Violante violante@princeton.edu +1 (609) 258 4003

## **Office Contact Information**

**Home Contact Information** 

Julis Romo Rabinowitz Building Princeton University Princeton, NJ 08544 465 Meadow Rd Apt 11302 Princeton, NJ 08540

### **Personal Information:**

Gender: Male Citizenship: China, People's Republic

### **Undergraduate Studies:**

BA in Economics, Peking University, 2012 - 2016

#### **Graduate Studies:**

Princeton University, 2016 - present

Ph.D. Candidate in Economics

<u>Dissertation Title</u>: "Essays on Estimating Impulse Responses in Macroeconometrics"

Expected Completion Date: June 2022

### References:

Professor Christopher A. Sims Department of Economics Princeton University +1 (609) 258 4033 sims@princeton.edu Professor Mikkel Plagborg-Møller Department of Economics Princeton University +1 (609) 258 9806 mikkelpm@princeton.edu

Professor Mark W. Watson Department of Economics Princeton University +1 (609) 258 4811 mwatson@princeton.edu

# **Teaching and Research Fields**:

Primary fields: Time Series Econometrics

Secondary fields: Empirical Macroeconomics

## **Teaching Experience:**

Princeton ECO 517: Graduate Econometric Theory I (TA, Fall 2018, Fall 2019, Fall 2020)

Princeton ECO 518: Graduate Econometric Theory II (TA, Spring 2018, Spring 2019, Spring 2020)

Princeton ECO 202: Statistics and Data Analysis for Economics (TA, Fall 2019)

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

Princeton University, Research Assistant to Prof. Christopher A. Sims
Princeton University, Research Assistant to Prof. Mikkel Plagborg-Møller

## **Professional Activities**

2019 Macro Financial Modeling Winter Meeting

2021 International Association for Applied Econometrics Annual Conference

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

2016 - 2021 Princeton Graduate Economics Fellowship
2013 Peking University Academic Excellence Award

#### **Research Papers:**

"Semi-parametric Identification of SVAR Models with Zero Lower Bound" (Job Market Paper)

US nominal interest rates started to be constrained at Zero Lower Bound (ZLB) after 2008, and a huge debate over conventional and unconventional monetary policies has been triggered. This paper adds ZLB into Structural Vector Autoregression (SVAR) models to flexibly characterize censored nominal interest rates and different effects of conventional and unconventional monetary policies. I consider identification of all structural parameters when we do not impose zero-restrictions on the effect of shadow interest rates. For Gaussian-distributed shocks, I prove that all structural parameters will be not be point-identified because of the same rotation problem as in conventional SVAR models. However, using non-Gaussian-distributed shocks can help us both correctly specify real data and achieve point-identification. Even if we do not know the parametric form of the non-Gaussian shock distributions, a general semi-parametric identification scheme following independent component analysis and Heckman selection models can be used to identify all the structural parameters. My simulation study supports my identification argument.

"Local Projections vs. VARs: Lessons From Thousands of DGPs" (with Mikkel Plagborg-Møller and Christian K. Wolf)

We conduct a simulation study of Local Projection (LP) and Vector Autoregression (VAR) estimators of structural impulse responses across thousands of data generating processes (DGPs), designed to mimic the properties of the universe of U.S. macroeconomic data. Our analysis considers various structural identification schemes and several variants of LP and VAR estimators, and we pay particular attention to the role of the researcher's loss function. A clear bias-variance trade-off emerges: Because our DGPs are not exactly finite-order VAR models, LPs have lower bias than VAR estimators; however, the variance of LPs is substantially higher than that of VARs at intermediate or long horizons. Unless researchers are overwhelmingly concerned with bias, shrinkage via Bayesian VARs or penalized LPs is attractive.

### **Research Paper in Progress:**

"International Evidence on Credit and Economic Activity" (with Christopher A. Sims)

We incorporate quarterly macroeconomic data on an international panel into a large Structural Vector Autoregression (SVAR) model, in order to uncover the different causal channels from credit aggregates to future GDP. We find evidence that the shock in the real estate sector mainly contributed to the unusual negative relationship between credit and GDP in the Great Recession.