Curriculum Vitae – Fall 2021

Family name: Bai
Given name: Yu
Gender: male
Date of birth: 31/08/1990
Citizenship: Chinese
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Qualifications

graduate (2016.9 - present)
- PhD in Finance
- Università Commerciale Luigi Bocconi, Milano, Italy

graduate (2013.9 – 2016.6)
- Master in Quantitative Economics(Econometrics)
- Huazhong University of Science & Technology, Wuhan, China

Undergraduate(2008.9 – 2012.7)
- Bachelor in Public Management (with distinction), Minor in English Language
- Shanxi University of Finance & Economics, Taiyuan, China

Research Grant

2020.9-2022.8. MIUR, "Hi-Di NET. Econometric Analysis of High Dimensional Models with Network Structures in Macroeconomics and Finance".

Awards and Scholarships

PhD fellowship, Bocconi University (2016-2020)

Research Interests

Time series econometrics; Panel data models; Bayesian econometrics

Publications

1. A Monte Carlo comparison of GMM and QMLE estimators for short dynamic panel data models with spatial errors, with Shaofu Zhou and Zhaoyuan Fan, *Journal of Statistical Computation and Simulation*, 88(2), 376-409, 2018.

Working papers

1. Time-varying GMM estimation, 2021. (*Job Market Paper*)
   Abstract: I develop time-varying continuously updated GMM estimation and inferential theory for moment conditional models whose coefficients vary stochastically and smoothly over time. Then, I propose two new tests of structural stability in this context. After deriving the asymptotic properties of the estimators and test statistics, I assess finite sample performance by an extensive Monte-Carlo study and illustrate their application by two empirical applications in macroeconomics and finance.
2. Macroeconomic Forecasting in a Multi-country Context, with A. Carriero, T. E. Clark and M. Marcellino, 2019. (*R & R*)
3. Estimation and inference in large heterogenous panels with stochastic time-varying coefficients, with G. Kapetanios and M. Marcellino, 2020. (*Under major revision*)

Work in Progress

1. Specification testing in linear regression models with smooth structural change, with G. Kapetanios and M. Marcellino.

2. Mixed frequency vector error correction models, with G. Graziani.

Research Experiences

Research Assistant for Prof. M. Marcellino, Multiple times

- Provide and check existing Matlab code for large dimensional macroeconomic forecasting models
- Provide Matlab code to estimate proxy VAR models

Teaching Experiences

Instructor

- Econometrics III, Bocconi University, Spring 2020, 2021.

Teaching assistant:

- Econometrics, Bocconi University, Spring 2019, 2020, 2021.
- Time Series Analysis, Huazhong University of Science & Technology, Spring 2014, 2015.

Conference Presentations

2021

- CMStatistics 2021, London, December 18-20 (*Scheduled*)
- 2021 IAAE Annual Conference, June 22-25
- Dongbei University of Finance and Economics, June 18
- 2021 North American Summer Meeting of the Econometric Society, June 10-13.

2020

- Capital University of Economics and Business, November 6
- The Econometric Society World Congress, August 17-21
- Strathclyde Business School, Brown Bag Seminar, January 30.

2019

- 2019 Asian Meeting of the Econometric Society, Xiamen, China, June 14-16.
- 25th International Panel Data Conference, Vilnius, Lithuania, July 4-5.

Language Skills

English (fluent), Chinese (native) and some basic Italian

IT Skills

Matlab (main) and some working knowledge on R/Gauss/Python/Julia