Andrii Babii

October 2020

Contact information
University of North Carolina at Chapel Hill
Department of Economics
Gardner Hall, CB 3305
Chapel Hill, NC 27599-3305
1(919)843-9453
babii.andrii@gmail.com
ababii.bitbucket.io

Education

Ph.D. Economics, Toulouse School of Economics, 2017. Advisor: Jean-Pierre Florens. Dissertation committee: Timothy Christensen, Jean-Pierre Florens, Eric Gautier, and Ingrid Van Keilegom.

MPhil European Diploma for Advanced Quantitative Economics, 2014.

M.Sc. Economic Theory and Econometrics, Toulouse School of Economics, 2013.

Professional experience

University of North Carolina at Chapel Hill, Assistant Professor, 2017-present.

Awards and Honors

2020 SoFiE Summer School Lectures, University of Chicago.

2020 SoFiE Summer School Lectures, NYU Shanghai, China.

2020 Research Award, Economics Department – UNC Chapel Hill.

2018 Jae-Yeong Song and Chunuk Park Award for Excellence in Graduate Teaching.

2012 Jean-Jacques Laffont Foundation's Scholarship.

2012 Google Summer of Code scholarship.

Publications

1. "Honest confidence sets in nonparametric IV regression and other ill-posed models", **Econometric Theory** (2020), 36(4), 658–706.
2. "ET inteview: Jean-Pierre Florens", joint with Eric Ghysels, **Econometric Theory** (2020), 36(3), 369–385.
3. "Commercial and residential mortgage defaults: spatial dependence with frailty", with Xi Chen and Eric Ghysels, **Journal of Econometrics** (2019), 212(1), 47–77.

Working papers

1. "Binary choice with asymmetric loss in a data-rich environment: theory and an application to racial justice", with Xi Chen, Eric Ghysels, and Rohit Kumar, 2020.
2. "Isotonic regression discontinuity designs", with Rohit Kumar, 2020 (R&R at **Journal of Econometrics**).
3. "High-dimensional mixed frequency IV regression", 2020 (R&R at **Journal of Business & Economic Statistics**).
4. "Are unobservables separable?", with Jean-Pierre Florens, 2020 (R&R at **Journal of Business & Economic Statistics**).
5. "Is completeness necessary? Estimation in nonidentified linear models", with Jean-Pierre Florens, 2020 (R&R at **Econometric Theory**).
6. "Machine learning time series regressions with an application to nowcasting", with Eric Ghysels and Jonas Striaukas, 2020 (R&R at **Journal of Business & Economic Statistics**).
7. "Machine learning panel data regressions with an application to nowcasting price earnings ratios", with Ryan T. Ball, Eric Ghysels and Jonas Striaukas, 2020 (R&R at **Journal of Econometrics**).
8. "Inference for high-dimensional regressions with heteroskedasticity and autocorrelation", with Eric Ghysels and Jonas Striaukas, 2020.

Work in progress

1. "Economic sources of time-varying correlations between financial assets", with Eric Ghysels and Peter Hansen, 2019.
2. "Convolution models on networks", with Jean-Pierre Florens, 2020.

Presentations

2021 5th ISNPS Conference (Paphos, Cyprus), New York Camp Econometrics XV (Mirror Lake, NY).

2020 International Association for Applied Econometrics Webinar (virtual), Computational and Methodological Statistics 2020 (virtual), World Congress of Econometric Society (virtual).

2019 Vanderbilt University, Duke University, Triangle Econometrics Conference (Durham, NC), AI Innovations Forum (UNC Kenan Institute/SAS), Big Data and Machine Learning in Econometrics, Finance, and Statistics (Chicago, IL), Midwest Econometrics Conference (Columbus, OH), 72nd European Meeting of the Econometric Society (Manchester, UK), Econometric Study Group Annual Conference (Bristol, UK), North American Summer Meeting of the Econometric Society (Seattle, WA), Financial Econometrics Conference (Toulouse, France).

2018 4th ISNPS Conference (Salerno, Italy), North American Summer Meeting of the Econometric Society (Davis, CA), Econometric Study Group Annual Conference (Bristol, UK), 71st European Meetings of Econometric Society (Cologne, Germany), UNC Kenan-Flagler Business School, Toulouse School of Economics, Midwest Econometrics Conference (Madison, WI), Triangle Econometrics Conference (Durham, NC).

2017: Triangle Econometrics Conference (Durham, NC), Toulouse School of Economics, Duke University, Université de Montréal, University of North Carolina at Chapel Hill.

2016: 27th $(EC)^2$ Conference on Big Data (Toulouse, France), European Winter Meeting of the Econometric Society (Edinburgh, UK), 69th Econometric Society European Meetings (Genève, Switzerland), Recent Advances in Econometrics (Toulouse, France), 3rd conference of the International Society for Non-Parametric Statistics (Avignon, France), 48èmes Journées de Statistique de la SFdS (Montpellier, France).

2015: ENTER exchange seminar (Tilburg), Conference on Inverse Problems in Econometrics (Northwestern).

2014: 5th Lindau Nobel Laureate Meeting on Economic Sciences, SoFiE Financial Econometrics Summer School (Harvard), SoFiE Financial Econometrics Summer School (Oxford).

Teaching Activities

Econ 590: Big Data and Machine Learning in Econometrics (3x, undergraduate), UNC, 2020-2021.

Econ 771: Introduction to Econometric Theory (4x, graduate), UNC, 2018-2021.

Econ 570: Applied Econometric Analysis (2x, undergraduate), UNC, 2018-2019.

Econ 970: Econometrics workshop (1x, graduate), UNC, 2018-2019.

TA for Intermediate Econometrics (undergraduate), Econometrics I (2x, graduate), and Econometrics (II), Toulouse School of Economics, 2014-2016.

Dissertation/Thesis committees

Dissertation Committees

Jonas Striaukas (external, in progress), Steve Raymond (2020), Anessa Custovic (2020), Jay Dennis (2019), Jose Alfonso Campillo Garcia (2018).

Honors Adviser

Katerina Wu (2020).

Professional Service

Internal

Ph.D. Written Examination Committee in Econometrics, 2018-2020.

Econometrics seminar organizer, 2019-2020.

Econometrics student workshop organizer (econometric clinics), 2018-2019.

Placement committee, 2017-2018.

External

Referring: Econometrica, Journal of Econometrics, Quantitative Economics, Journal of Applied Econometrics, Journal of Business and Economic Statistics, Econometric Theory, Journal of Financial Econometrics, Electronic Journal of Statistics, Journal of Nonparametric Statistics, ERC Grants.

Program committees: Econometric Society World Congress 2020, AI Innovations Forum, joint with Kenan Institute and SAS.

Other Experience

RA to Prof. Eric Gautier, Summer-Fall 2015.

R project for statistical computing, Student Developer, 2012.

Unilever Ukraine, Trainee, Kyiv, Ukraine, 2009.

Institute of Society Transformation, Intern, Kyiv Ukraine, 2008.