Vladislav Morozov

Address
Universitat Pompeu Fabra
Carrer Ramón Trias Fargas 25-27
Office 20.1E70
08005 Barcelona, Spain

Contact Information
Email: vladislav.morozov@upf.edu
Webpage: https://vladislav-morozov.github.io/

Education

2019 – **PhD Candidate in Economics and Finance**
Universitat Pompeu Fabra
Provisional thesis title: Essays in Heterogeneous Panel Data Econometrics
Advisors: Christian Brownlees, Kirill Evdokimov

2018 – 2019 **Master of Research in Economics and Finance**
Universitat Pompeu Fabra

2017 – 2018 **Master of Science in Economics**
Barcelona Graduate School of Economics

Research Interests

- Panel data econometrics, econometrics of heterogeneity
- Energy economics

Working Papers

- **Inference on Extreme Quantiles of Heterogeneous Coefficients In Panel Data**

  Abstract: We develop a methodology for conducting inference on extreme quantiles of unobserved individual heterogeneity (heterogeneous coefficients, heterogeneous treatment effects, and other unobserved heterogeneity) in a panel data or meta-analysis setting. Examples of interest include productivity of most and least productive firms or prediction intervals for study-specific treatment effects in meta-analysis. Inference in such a setting is challenging. Only noisy estimates of unobserved heterogeneity are available, and approximations based on the central limit theorem work poorly for extreme quantiles. For this situation, under minimal assumptions we derive an extreme value theorem for noisy estimates and appropriate rate and moment conditions. In addition, we develop a theory for intermediate order statistics. Both extreme and intermediate order theorems are then used to construct confidence intervals for extremal quantiles. The limiting distribution is non-pivotal, and we show consistency of both subsampling and simulating from the limit distribution. Furthermore, we provide a novel self-normalized intermediate order theorem. In a Monte Carlo exercise, we show that the resulting extremal confidence intervals have favorable coverage properties in the tail.

- **Unit Averaging For Heterogeneous Panels** (with C. Brownlees)

  In this work we introduce a unit averaging procedure to efficiently recover unit specific parameters in a heterogeneous panel. The procedure consists in estimating the parameter of a given unit using a weighted average of all the unit-specific parameter estimators in the panel. The weights of the average are determined by minimizing an MSE criterion that we derive. We analyze the properties of the minimum MSE unit averaging estimator in a local heterogeneity framework inspired by the literature on frequentist model averaging. The analysis of the estimator covers both the cases in which the cross-sectional dimension of the panel is fixed and large. In both cases, we obtain the local asymptotic distribution of the minimum MSE unit averaging estimators and of the

associated weights. A GDP nowcasting application for a panel of European countries showcases the benefits of the procedure.

Works in Progress

- Distribution of Marginal Effects With Heterogeneity of Arbitrary Dimension
- Distribution Equality Tests With Noisy Observations (with A. Sy)
- Loss-Driven Confidence Sets

Teaching Experience

2018-2022	TA: Advanced Econometric Methods I and II	Graduate/BGSE
2022	TA: Forecasting Techniques	Undergraduate/UPF
2021	TA: Econometrics 2	Undergraduate/UPF
2018-2021	TA: Probability and Statistics	Undergraduate/UPF
2018	TA: Econometrics 1	Undergraduate/UPF

Conference Participation

2022 Conference of the Royal Economic Society, 27th International Panel Data Conference

2021 Symposium of the Spanish Economic Association, European Winter Meeting of the Econometric Society, BGSE Jamboree, ERFIN (plenary), 9th WEEE, 26th International Panel Data Conference, 7th RCEA Time Series Workshop