MARTINA PONS

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Education

University of Bern, Ph.D., Economics (June 2020-May 2025). Supervisor: Blaise Melly
Massachusetts Institute of Technology, Visiting Student (Sept 2023-June 2024).
Study Center Gerzensee, Swiss Program for Beginning Doctoral Students in Economics, 2021

University of Bern, M.Sc., Economics, *summa cum laude*, 2020.
University of Copenhagen, Visiting Student, (Sept 2019-Jan 2020).

University of Bern, B.Sc., Economics, *insigni cum laude*, 2018.

HTW Chur, University of Applied Sciences, B.Sc., Tourism, 2016.

Research

Research interest: Econometrics, Panel Data, Quantile Methods, Health Economics

Working papers

1. **Quantile on Quantiles [Job Market Paper]**. *Winner of the IAAE 2024 best student paper award*

   Distributional effects provide interesting insight into how a given treatment impacts inequality. This paper extends this notion in two ways. First, it recognizes that inequality spans multiple dimensions, for example, within and between groups, with treatments potentially influencing and creating tradeoffs between both. Second, the paper addresses the nontrivial challenge of ranking heterogeneous groups, which heavily depends on the social welfare function of the policymaker. To this end, I introduce a model to simultaneously study distributional effects within and between groups while remaining agnostic about this social welfare function. The model consists of a quantile function with two indices, the first capturing heterogeneity within groups and the second addressing the between-group dimension. I propose a two-step quantile regression estimator involving within-group regressions in the first stage and between-group regressions in the second stage. I show that the estimator is consistent and asymptotically normal when the number of observations per group and the number of groups diverge to infinity. In an empirical application, I study the effect of training on the distribution of firms' performance within and between markets in Kenya. The results show large positive effects among the successful firms in the best-performing markets, suggesting potential complementarities between firms and market performance.

2. **Minimum Distance Estimation of Quantile Panel Data Models** (joint with Blaise Melly).

   We propose a minimum distance estimation approach to quantile panel data models where the unit effects may be correlated with the covariates. The estimation method is computationally straightforward to implement and fast. We first compute a quantile regression within each unit and then apply GMM to the fitted values from the first stage. The suggested estimators apply (i) to grouped data, where we observe data at the individual level, but the treatment varies at the group level, and (ii) to classical panel data, where we follow the same units over time. Depending on the variables assumed to be exogenous, this approach provides quantile analogs of the classical least squares panel data estimators such as the fixed effects, random effects, between, and Hausman-Taylor estimators. Further, we provide a more precise estimator for grouped (instrumental) quantile regression than the existing ones. We establish the asymptotic properties of

our estimator when the number of units and observations per unit jointly diverge to infinity, and we suggest an inference procedure that automatically adapts to the (potentially) unknown rate of convergence of the estimators. Monte Carlo simulations show that our estimator and inference procedure also perform well in finite samples when the number of observations per unit is small. In an empirical application, we find that the introduction of the food stamp program increased the birth weights only at the bottom of the distribution.

3. **Intergenerational Persistence in Diet** (joint with Frédéric Kluser). (*Submitted*)

   This paper provides novel evidence on the intergenerational transmission of dietary choices from parents to children by exploiting unique grocery transaction records matched with administrative data. We document a strong intergenerational persistence of diet that exceeds income transmission across all measures. We discuss potential mechanisms, and a counterfactual analysis shows that only 10% of the intergenerational persistence in diet can be explained by the transmission of income and education. In line with these results, we introduce a habit formation model and argue that the formation of dietary habits during childhood and their slow alteration are key drivers of our findings.

Publications

The Impact of Air Pollution on Birthweight: Evidence from Grouped Quantile Regression. 2022, Empirical Economics 62, 279–296.

Seminars, Conferences & Workshops

2024: Workshop on Recent Advances in Panel and Network Data (Oxford, UK), International Association for Applied Econometrics (IAAE) Annual Conference (Thessaloniki, Greece), Internaltional Panel Data Conference, (Orléans, France), European meeting of the Econometric Society, (Rotterdam, Netherlands).

2023: Econometrics Lunch (MIT), International Association for Applied Econometrics (IAAE) Annual Conference, (Oslo, Norway), Young Swiss Economists Meeting, (Zurich, Switzerland).

2022: 2nd International Econometrics PhD Conference (Rotterdam, Netherlands), COMPIE (COunterfactual Methods for Policy Impact Evaluation) Conference (Mannheim, Germany), International Panel Data Conference (Bertinoro, Italy), Lunch Seminar, University of Geneva (Geneva, Switzerland).

Grants and Awards

Best Student Paper Award (ex aequo), IAAE Thessaloniki, 2024

University of Bern, Doc Mobility Grant to visit the MIT, 2023

Prize for the best performance in the Swiss Program for Beginning Doctoral Students in Economics (ex aequo), Study Center Gerzensee, 2021

VWG Prize (Award for the Best Master Thesis), 2020

Award for the Best Master's Degree of the Faculty of Business, Economics and Social Sciences, University of Bern, 2020.

Academic Experience

University of Bern, Department of Economics, Research Assistant for Prof. Blaise Melly, *February 2020-May 2020*

University of Bern, World Trade Institute, Research Assistant for the DESTA Project, *May 2018-November 2018*

Teaching Experience

Bachelor	Econometrics I (2020), Essential Mathematics for Economists[a] (2019)
Master/PhD	Seminar Workshop in Econometrics II[a] (2022, 2023), Econometrics II[a] (2020, 2021, 2022, 2024), Time Series Analysis II[a] (2021, 2022) Econometrics Sequences 1 & 3[b] (2023, 2024)

[a]: University of Bern, [b]: Study Center Gerzensee

Skills

Languages: Italian (native), German (fluent), English (fluent), Spanish (fluent)

Softwares: R, Stata, Latex, Github, Matlab.