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Personal Information:

01/30/1993, female, Chinese

Undergraduate Studies:

Bachelor, Economics, School of Economics, Huazhong University of Science and Technology, 2010-2014.

Masters Level Work:

Master, Financial Economics, School of Economics, Singapore Management University, 2016-2017

Graduate Studies:

Singapore Management University**,** 2017 - present
Thesis Title: Generalized Nonparametric Estimation under Additive Structure
Expected Completion Date: 06/2023

Thesis Committee and References:

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Teaching and Research Fields:

Primary fields: Econometric Theory, Nonparametric Econometrics
Secondary fields: Panel Data

Teaching Experience:

Teaching Assistant	
Econometrics I&II (M.Sc)	Fall 2018, 2019,2020, 2021
Derivatives Securities(M.Sc)	Spring 2019
Empirical Finance I&II (M.Sc)	Spring 2019,2020
Economic and Society	Fall 2019
International Trade	Summer 2019
Microeconomics I&II (M.Sc)	Fall 2017
Instructor	
Math Camp (M.Sc)	Summer 2019

Honors, Scholarships, and Fellowships:

Doctoral Scholarship, Singapore Management University 2017 - 2022

Research Papers:

"Efficient Nonparametric Estimation of Generalized Panel Data Transformation Models with Fixed Effects"(Job Market Paper)

Abstract:
In this article, we consider a generalized panel data transformation model with fixed effects where the structural functions are assumed to be additive. Our model does not impose parametric assumptions on the transformation function, the structural function, or the distribution of the idiosyncratic error term. We propose a multiple-stage Local Maximum Likelihood Estimator (LMLE) for the structural functions. In the first step, we apply Logistic Series Estimator (LSE) to estimate conditional expectation and then apply matching method to obtain initial estimators. In the second step, instead of estimating the Cumulative Distribution Function (CDF) directly, we construct a new link function by introducing logistic function to ensure that the estimated probability is always within [0,1]. We use local-polynomial kernel regression to estimate the constructed link function. In the third step, given the estimators in Steps 1 and 2, we refine the initial estimator by the local-linear kernel regression. The greatest advantage is that all optimization problems are convex and thus overcome the computational hurdle for existing approaches to the generalized panel data transformation model. The final estimates of the additive terms achieve optimal one-dimensional convergence rate, asymptotic normality and oracle efficiency. The Monte Carlo simulations demonstrate that our new estimator performs well in finite samples.

"Efficient Nonparametric Estimation of the Generalized Additive Model with an Unknown Link Function"

Abstract:
In this article, we consider a generalized additive model with an unknown link function (GAMULF). Our model does not impose parametric assumptions on the link function, the additive function, or the distribution of the idiosyncratic error term. We propose a three-stage nonparametric least squares (NPLS) estimator for the additive functions. In the first step, we estimate conditional expectation by the local-linear kernel regression and then apply matching method to the splines series to obtain the initial estimators. In the second step, we use the local-polynomial kernel regression to estimate the link function. In the third step, given the estimators in Steps 1 and 2, we apply the local-linear kernel to refine the initial estimators. The great advantage is that the estimates obtained at all stages have closed-form expressions and thus overcome the computational hurdle for existing estimators of the GAMULF model. The final estimates of the additive terms achieve the optimal one-dimensional convergence rate, asymptotic normality and oracle efficiency. Monte Carlo simulations demonstrate that our new estimator performs well in finite samples.

Computer Skills:

Python (Proficient), R (Proficient)

Languages:

English (Fluent), Chinese (Native)