

Abstract

A linear model with varying random coefficients is considered. Varying random coefficients are modeled additively separable with an unknown nonlinear function of covariates and an unobservable part. The varying random coefficient model allows for heterogeneous marginal effects which might vary with covariates. Identification of the distribution of marginal effects is established. The estimator is based on weighted sieve minimum distance. Its L2 rate of convergence is derived. Our estimator is easy to implement and performs well in finite sample.