ABSTRACT

RESAMPLING METHODS IN ECONOMICS

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This dissertation is to investigate the application of bootstrapping methods in economics, for both theoretical and empirical analysis. The size and power of two J-type tests, a bootstrap and a pretest test, are compared for weakly correlated or nearly orthogonal non-nested regression models. Within the field of time series, the bootstrap technique is combined with the nonparametric methodology to estimate conditional quantiles for financial time series. Three newly developed bootstrap based methods (nonparametric wild bootstrap, block bootstrap and subsampling) are adopted, and the local linear nonparametric estimation is then used to estimate the conditional quantile. Moving block bootstrap is applied to generate confidence intervals for the conditional quantile estimation. The last part is to use semi-parametric models to explain university participation decisions of Canadian families with use of cross-sectional micro-data. The family's permanent income is estimated at the first stage and then included into the nonparametric part of the semi-parametric model. The wild bootstrap method is applied to generate confidence intervals of estimates to deal with the problem of introducing a generated regressor into regression models.