

Nonparametric Comparison of Predictive Accuracy

by

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ABSTRACT

A bootstrap-based method of comparing predictive accuracy of two forecasts is proposed. The approach uses simple standardization for cross-sectional data and Normalizing and Variance Stabilizing (NoVaS) transformation for time series data. Transformation is necessary to standardize differential loss measure in order for conditional heteroskedasticity not to mask differences or exaggerate random differences between two forecast errors.

Simulation study indicated robustness of the proposed test in the presence of heteroskedastic errors, poor model fit and multicollinearity in cross-sectional data. For time series data, the proposed test illustrated robustness when the times series is short and volatility is present.